

# FINANCIAL TIMES



**EU anger**  
Patience with Britain runs out  
Ian Davidson, Page 12



**Hong Kong**  
Handover bonanza ahead  
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**Car wars**  
Paying for cleaner emissions  
Environment, Page 10

**Today's surveys**  
UK engineering  
Power generation equipment  
Separate sections

World Business Newspaper

WEDNESDAY JUNE 26 1996

## Beijing and Bonn attempt to end dispute over Tibet

Beijing and Bonn tried to stop their dispute over Chinese policy in Tibet, which has led to the cancellation of several German ministerial visits, damaging their long-term relations. A Chinese foreign ministry spokesman said that, as long as the German government took "concrete and effective" measures to make amends, relations would not be allowed to deteriorate further. He did not specify what the measures might involve. Page 14; Editorial Comment, Page 15

**No commitment on West Bank troops:** Benjamin Netanyahu, Israel's prime minister, has refused to give Warren Christopher, US secretary of state, a commitment that his government would honour Israel's promise to pull troops out of the Israeli-occupied West Bank town of Hebron, a flashpoint of Arab-Jewish violence. Page 4; Editorial Comment, Page 13

**Jobs cut at French naval shipyards:** The French government announced a big reorganisation of its DCN navy shipyards, putting them under pressure to become more efficient and cutting the 24,000 workforce by a quarter. Page 14; Jobless rate near record, Page 3

**Growth set to fall in eastern Germany:** The east German economy will grow no more than 3 per cent this year, nearly half the rate forecast a year ago, according to reports by the institutes for economic research in Halle and Berlin. Total unemployment will remain high at 30 per cent of the labour force. Page 2

**Italy details media and telecoms plans:** Media and telecommunications companies will be free to compete with one another, supervised by a single regulatory authority, under planned legislation in Italy, according to the country's post and telecoms minister. Page 2

**Dole takes initiative on TV speeches:** Republican Bob Dole has agreed to a new proposal for US presidential candidates to deliver short political speeches on free time donated by the TV networks before the November elections. Page 5

**Quelle, Germany's large mail order company re-established after the second world war to provide cheap, quality clothes. Germans, moved apart by signing a contract with Karl Lagerfeld, the luxury designer. Page 15**

**IBM to create 1,000 jobs in Ireland:** International Business Machines, the world's largest computer company, is to create 1,000 jobs by building a new customer support centre in Ireland and expanding its call centre in Scotland. Page 8

**Nycomed loses 23% after warning:** Shares in Nycomed, the Norwegian pharmaceuticals group, plunged almost 23 per cent after the company warned that profits this year would be well below market expectations. Page 15; Lex, Page 14; World Stocks, Page 34

**Lada manufacturer lifts production:** AvtoVAZ, the Russian manufacturer of Lada cars, remains in a weak financial position after recording a net loss of Rb2,020bn (\$398m) last year, but is slowly improving its productivity and expanding its production. Page 16

**Deutsche Telekom may list in Asia:** Deutsche Telekom, the state-owned German group, said it was considering listing its shares on an Asian stock exchange. Page 20

**Axa sets price for NY listing:** Axa, the French insurance group, announced that its shares to be listed on the New York Stock Exchange are to be priced at FF274 each. Page 16

**Boeing, the US aircraft manufacturer, said it expected business in Asia to grow strongly in the next 10 years. Page 8**

**AOL chief quits after 4 months:** William Brazzous has resigned as president and chief operating officer after four months at America Online, the leading US online service provider. Page 8

**US hurdle for BA-American deal:** US airlines are rallying to prevent the proposed alliance between British Airways and American Airlines from being approved. Page 8

**The World Bank announced an important reform of its lending to poor countries which will substantially widen the choice of currencies in which they can borrow. Page 14**

**Record international borrowing for Fiat:** Fiat, the Italian automotive and industrial group, has appointed Citibank International and Deutsche Bank Luxembourg to organise a \$1bn multi-currency credit line, its largest ever international credit facility. Page 16

STOCK MARKET INDICES	
New York: Dow Jones Ind. 5,705.8 (+12.18)	NASDAQ Composite 1,178.9 (+4.0)
Europe and Far East	
UK: FTSE 100 5,874.5 (+31.3)	Nikkei 22,597.17 (+6.03)
US LUNCHTIME RATES	
Federal Funds Rate 5.75%	3-month Treasury Bill 5.50%
100-day Bond 5.625%	Yield 7.025%
OTHER RATES	
3-month Interbank 3.4%	90-day T-bill 5.5%
100-day T-bill 5.5%	10-year T-bill 7.0%
Germany: 10 yr Bund 57.73	Japan: 10 yr JGB 56.0874
NORTH SEA OIL (August)	
Brent Dated \$16.57	Tokyo Close ¥108.1

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## Taiwan police name 126 triads in crime crackdown

Taiwan's National Police Administration yesterday publicly identified 126 of the country's top crime organisations, known as triads, in an unprecedented crackdown on organised crime. It also named 5,800 people who it said were gangsters. The public disclosure of the extent of organised crime in Taiwan comes at an awkward time for the country's first democratically elected president, Mr Lee Teng-hui, who is under increasing pressure to tackle crime and its links with corporate and public life. The police say triads - known as "black societies" in Chinese - have taken advantage of the island's fledgling democracy to "launder" their reputations by successfully standing for public office. Several known gangsters

who had moved into public life were identified in yesterday's United Daily News, a leading mass selling newspaper tipped off by police. The triads are increasingly moving into legitimate businesses, the paper said, especially public infrastructure and construction, departing from traditional businesses such as gambling and prostitution. The gang members named include elected representatives at national and local government, some of whom were said to control from behind the scenes large crime organisations. The paper also published a detailed map of Taiwan showing the number of gangsters and the main gangs in each county and city based on information provided by the police administration. The largest Taiwan-based triad is the Bamboo Union Gang with

over 600 identified members, followed by the Four Seas Gang with 500-plus members and the Heavenly Path Alliance numbering 400 or more. Mr Lee's popularity has sunk following his election in March. Several big corruption scandals have erupted in recent months, implicating senior figures in the ruling party as well as hundreds of policemen. The popular justice minister,

Mr Ma Ying-jeou, widely regarded as having led an effective campaign against corruption and organised crime during his three years in the post, was demoted to minister without portfolio in a cabinet reshuffle earlier this month. The NPA, part of the interior ministry, has drafted an organised crime prevention bill, aimed at preventing known gangsters from running for public office.

## Sackings strengthen Lebed

### Yeltsin ousts seven more generals in army purge

Russian President Boris Yeltsin sacked seven hardline generals yesterday in a move that threatened to destabilise the country's army a week ahead of a presidential run-off between Mr Yeltsin and Mr Gennady Zyuganov, his Communist rival. The purge followed the dismissals last week of the nation's four most powerful hardline politicians, and further strengthened Mr Alexander Lebed, the retired general who joined the Kremlin team as security chief after finishing third in the first round of presidential voting. Four of the officers sacked yesterday had been publicly named last week by Mr Lebed, who demanded their sackings because of their alleged efforts to protest at the dismissal of General Pavel Grachev, the minister of defence, who was one of the victims of last week's government shuffle. Russian military analysts said they expected the purge of Mr Grachev's supporters to continue beyond the second stage of the presidential election, assuming Mr Yeltsin wins. This would leave the top jobs free for allies of the new defence minister, who has yet to be named. They warned the shake-up could create confusion in Russia's security forces at a decisive moment in the nation's development. Over the past 10 days, the defence minister, the chief of the

### foreign intelligence service - a revamped offspring of the KGB - the head of the presidential guard and other senior military personnel have all been fired.

Yeltsin's purge included Gen Victor Barynkin, first deputy head of the general staff, Gen Vladimir Shulikov, deputy commander of land forces, and Gen Valery Lapshov, head of the defence minister's personal staff. The removal of Grachev loyalists from the ministry appeared to consolidate last week's victory of the reformist faction in the government over Kremlin hardliners, in a struggle which has dominated Russian political life for the past five years. Another sign of what some reformist observers are hoping will be a decisive shift in Mr Yeltsin's often ambiguous politics came when the president signed a decree ordering the withdrawal of Russian troops from the Czech republic by September 1. The pull-out from the deeply unpopular conflict could win votes for Mr Yeltsin on July 3 in the run-off against Mr Gennady Zyuganov, the Communist party candidate. The pull-out had been opposed by hawks in the military, including Gen Grachev, one of the strongest voices behind the decision to invade Chechnya. But Mr Yeltsin was careful to hedge his bets yesterday, telling

Continued on Page 14

Russian economy shrinks, Page 2



An estimated 25,000 people, protesting against the forthcoming G7 summit, marched in Lyons, France, yesterday. The demonstrators demanded that the leaders of the major industrial powers, whose three-day meeting begins tomorrow, give priority to jobs rather than monetary policy. The banner reads: "G7: Take care, these men are dangerous", and displays caricatures of the G7 leaders

## Volvo to sell \$2bn stake in drug group

Offer will be for two-thirds of 14% holding in Pharmacia & Upjohn

Volvo, the car and truck maker, is to launch one of Sweden's biggest share offerings next month when it sells at least two-thirds of its 14 per cent holding in the Swedish-US pharmaceutical group Pharmacia & Upjohn for almost \$2bn. The global offer, to be priced in late July, will be for 46m Pharmacia & Upjohn shares, with an option to sell a further 6.5m if the offer is over-subscribed. Pharmacia & Upjohn shares yesterday traded at SEK285, valuing the tranche Volvo will sell at SEK13.1bn (\$1.96bn). Volvo was committed to selling all its Pharmacia & Upjohn holding by the end of this year as part of a SEK40bn non-core asset

disposal programme. But it held back from offering the entire holding in one tranche apparently because of worries about placing such a large stake. It has pledged to hold on to its residual stake for six months after the July sale. The offering will be worth less than the SEK18bn flotation in March of a 56 per cent stake in Sweden. Volvo's rival Swedish truckmaker, Scania, has opted to sell a further 6.5m if the offer is over-subscribed. Pharmacia & Upjohn shares yesterday traded at SEK285, valuing the tranche Volvo will sell at SEK13.1bn (\$1.96bn). Volvo was committed to selling all its Pharmacia & Upjohn holding by the end of this year as part of a SEK40bn non-core asset

50 per cent stake in Pharmacia - the company which last year merged with Upjohn to form the present group. Goldman Sachs and Merrill Lynch have been appointed the joint global co-ordinators for the sale. Analysts said the timing was reasonably favourable. Although pharmaceutical stocks are weaker than last year, Pharmacia & Upjohn can argue that its merger - which created one of the world's top 10 drug groups - means the company is well

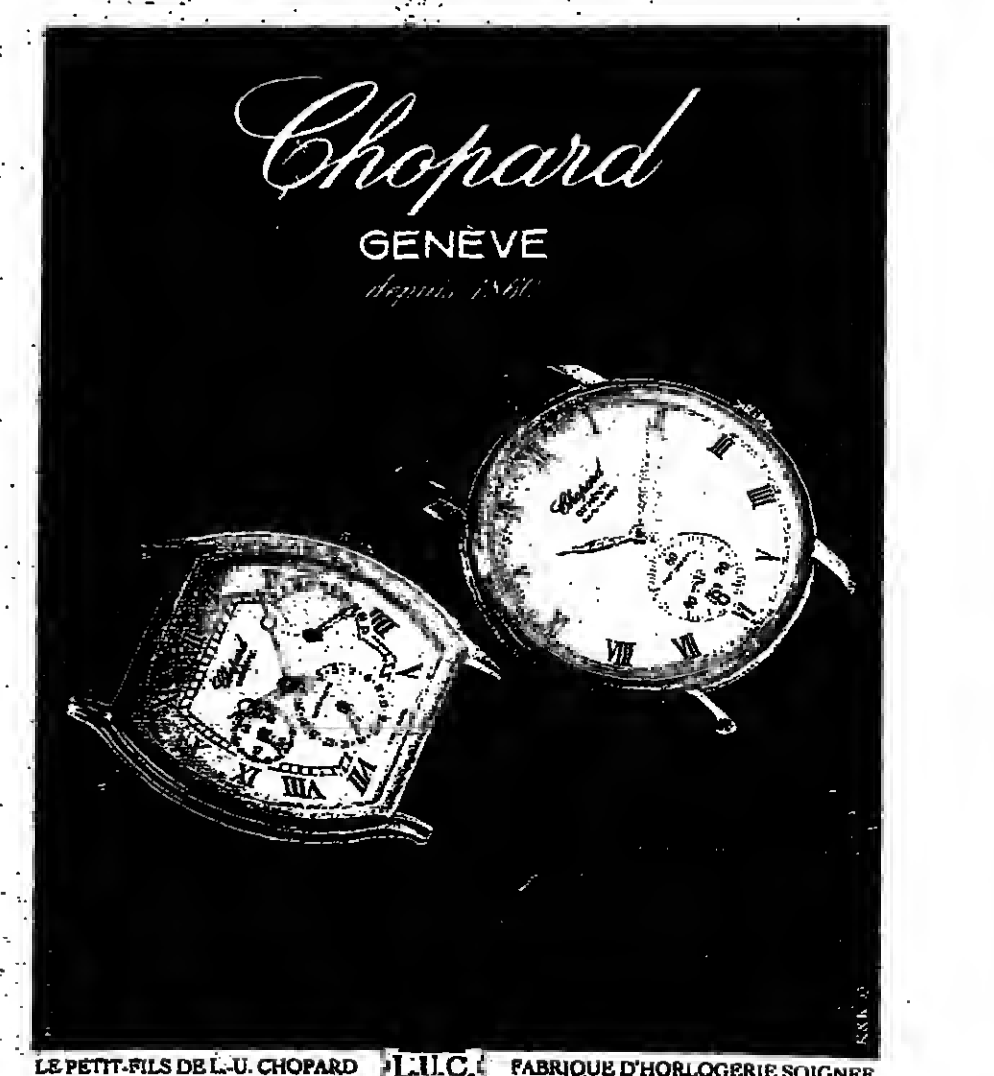
placed at a time when the industry is undergoing restructuring. Profits in the first quarter were down from \$238m to \$50m following initial restructuring charges from the merger. Sales rose 3.5 per cent to \$1.74bn - slower than other large drug companies. Pharmacia & Upjohn said it is on track to achieve projected savings from streamlining its combined operations of \$500m a year. Continued on Page 14

## Brussels sees EU expansion eastward without budget rise

The European Commission calculates that the European Union can absorb East European entrants without increasing its budget in real terms in the next 10 years. The Brussels assumption reflects increasing pressure from net contributors such as Germany, the Netherlands and the UK to control EU spending. But the implication is that net beneficiaries will see some reductions in Brussels aid as a result of tighter rules on regional support. It also points to a longer-than-expected timetable for membership for the former Communist countries of central and eastern Europe. A senior Commission official said yesterday the earliest membership for an advanced guard of central European countries was likely to be around 2002-2003. Malta and Cyprus could join sooner, depending on resolution of the Greek-Turkish dispute over Cyprus. As part of an internal review, the Commission has produced

new calculations which assume the costs of expansion to eastern Europe are high, but manageable. Central to this assumption is the view that the EU budget is unlikely to rise beyond 1.27 per cent of EU gross domestic product between 1999-2006. Commission calculations show around 0.46 per cent of EU GDP would be available for regional aid and "cohesion" funds, which funnel money to Greece, Ireland, Portugal and Spain. These figures would create a regional aid pot of Ecu260bn (\$321bn) disbursing an average of Ecu37bn a year - a 30 per cent increase on the current 1994-99 regional aid budget of Ecu107bn, disbursing Ecu29bn a year. Mrs Monika Wulf-Mathies, EU regional affairs commissioner, told a committee of the Bundestag in Bonn last week that it was possible to put forward an "attractive" financial package for central and eastern European countries, including extra money ahead of accession. Mrs Wulf-Mathies said it might be possible to increase funding under the Phare aid programme

seven-fold from Ecu1bn a year, raising total funds to Ecu650bn between 2000 and 2006. The commissioner also sought to reassure net recipients, notably Spain, that there would be enough money to satisfy their needs. But she served notice that some regions in Spain, Portugal, Ireland and Italy - as well as France, Belgium and the Netherlands - would no longer qualify for Brussels aid. Under so-called Objective One funding, regions can qualify for EU funds if their per capita GDP is below 75 per cent of the EU average. The Commission wants to tighten the aid map, partly to raise money for eastern Europe and partly to wean off net recipients who have benefited from regional aid. Ireland is the most obvious target. Regional aid accounts for one quarter of the total EU budget and is intended to help poorer countries cope with the single market. It is the second biggest item behind the Common Agricultural Policy. Labour outlines vision, Page 9



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سكنا من الاجل



NEWS: EUROPE

Gesamtmittel calls for more flexible arrangements within the regional wage agreement structure

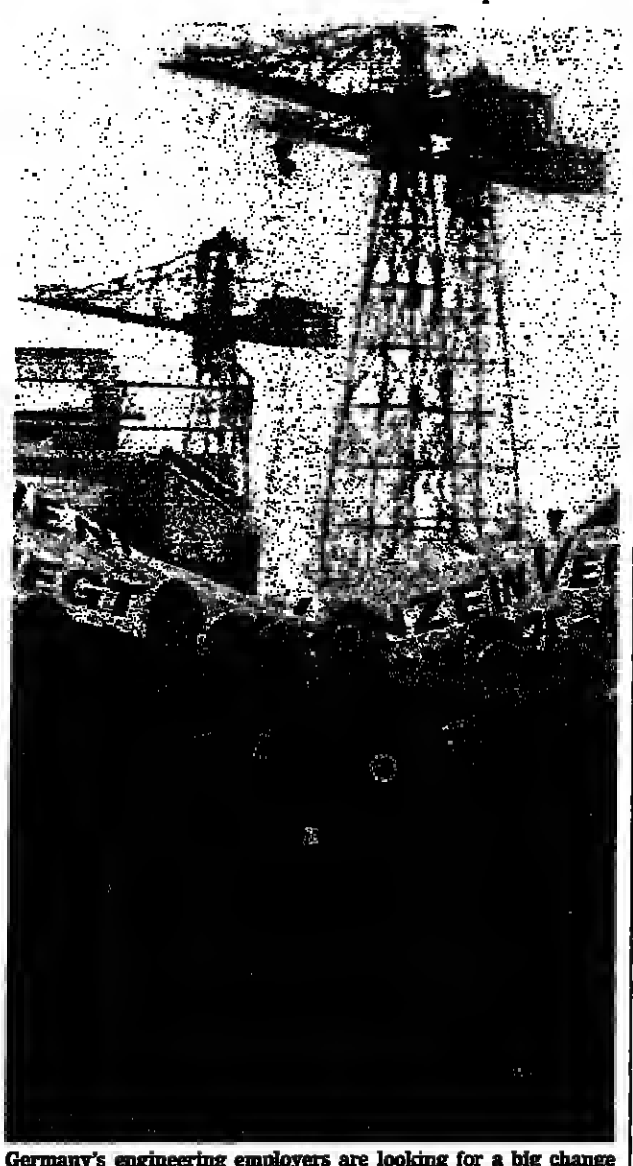
German employers seek local pay deals

By Wolfgang Münchau in Bonn

German engineering employers yesterday called for a radical overhaul of their relationship with trade unions to allow individual companies to reach plant-level wage deals.

medium-sized companies the ability to deal with sudden demand swings. Mr Stumpfe said a minority of German electrical and engineering companies "thinks the system is out-of-date and wants to conduct wage talks within the companies themselves.

He said that the strength of the export industry was proof to the contrary, and added that the employers had stirred up a debate about competitiveness only as a pretext to seek permanently higher profits.



Germany's engineering employers are looking for a big change in their relationship with industrial workers such as these, allowing companies to opt out of regional accords

Growth set to fall in eastern Germany

By Judy Dempsey in Berlin

The east German economy will grow no more than 3 per cent this year, nearly half the rate forecast a year ago, according to reports by the institutes for economic research in Halle (IWH) and Berlin (DIW).

The IWH warns, however, that pumping more investment from west Germany to the east - currently a net DM140.5bn (\$92bn) a year - will not give its economy the impetus to establish sustained growth.

EUROPEAN NEWS DIGEST

Economy in Russia shrinks

Mr Yevgeny Yasin, the Russian economy minister, warned yesterday that the country's economy had continued to contract this year instead of growing, as Russian and western analysts had predicted.

Although Moscow has been meeting tough inflation targets agreed with the International Monetary Fund, Mr Yasin, one of the nation's most senior market reformers, warned that financial stabilisation had not yet delivered the promised economic revival.

Mr Yasin said gross domestic product last month had contracted by 3 per cent compared with May 1995, and that industrial production had fallen by 4 per cent. Furthermore, despite the government's largely successful battle against inflation, capital flight out of Russia had increased over the past few months.

He attributed these unexpectedly gloomy figures to fears of a Communist victory in the presidential election on July 3. "The Communists have not come to power - and I hope they do not - but the fear that they might has had an extremely negative effect on the economy," he said.

Mr Yasin said he hoped "that this will be a temporary dip and the economy will rebound in June and July" after the elections. If President Boris Yeltsin was re-elected, the cabinet's top priority would be to battle crippling low rates of tax collection, he said.

Norwegian oil strike ends

Oil rig service workers from the Norwegian Oil and Petrochemical Union returned to work yesterday after a 25-day walkout over pay. The strike of 225 personnel brought drilling operations to a standstill at 16 rigs on the Norwegian continental shelf.

Paris has dearest hotels

Parisian hotels still have Europe's most expensive room rates, despite terrorist activity, transport strikes and a strong currency, according to a survey\* of 317 hotels in the largest European cities.

EU agrees pollution curbs

European Union environment ministers meeting in Luxembourg yesterday adopted common curbs on pollution from diesel-powered cranes, forklifts, and excavators.

Dutch forecast higher growth

The Netherlands yesterday revised its growth forecast for next year, with the government's central planning bureau saying real gross domestic product was expected to rise 2.75 per cent to 3 per cent, compared with a 1997 projection in April of 2.5 per cent to 2.75 per cent.

Çiller and Refah still talking

An aide to the Turkish conservative leader, Mrs Tansu Çiller, said yesterday that her True Path Party (DYP) had yet to reach an agreement to form a coalition with Refah, the Islamist Welfare party, but that talks would continue.

Finland set for 2-3% growth

Finland's gross domestic product figures for the first quarter were in line with expectations and showed the economy is well on track for full-year growth around 2.3 per cent as forecast. GDP rose by 1 per cent year-on-year and by 0.7 per cent quarter-on-quarter seasonally adjusted, according to Statistics Finland.

Sweden's balance of trade showed a preliminary SKr12.4bn (\$1.8bn) surplus last month, against SKr9.7bn in May last year and a revised SKr10bn in April.

Italy details media and telecoms plans

By Andrew Hill in Milan

Media and telecommunications companies will be free to compete with one another in Italy under the supervision of a single regulatory authority, the country's minister said yesterday.

control telecoms holding company. The new legislation is likely to be presented by the middle of July, when trading in the shares of Mediaset, the media company controlled by Mr Silvio Berlusconi, is due to begin.

Stet and its subsidiaries in telecoms. In what was his first detailed policy statement, Mr Maccanico said the new legislation would open telecoms infrastructure and services to full competition from January 1, 1997, except voice telephony which would remain a monopoly until the beginning of 1998.

responsible for the printed press, consisting of two committees, one supervising infrastructure and the other services and content. Mr Maccanico said establishing a regulatory authority was a prerequisite for the rapid sale of the government's majority stake in Stet.

Mr Clampi at yesterday's Ina press conference denied press reports he was failing to get his way in imposing his rigorous policies on his partners in the coalition government. He also underlined the Ina operations showed the faith of the markets in the new government's policies.

Lira strengthens as interest rates decline

By Robert Graham in Rome

For the first time in two years the Italian lira has touched the psychologically important parity of 1,000 to the D-Mark. Its improvement was matched by a fall in interest rates on certain short-term treasury bills to below 7 per cent for the first time in three years.

ina, the insurance group. This raised L3,250bn (\$2.1bn) for 34 per cent of Ina at short notice and was heavily oversubscribed by domestic and international investors. Last week the new government was obliged to introduce a L16,000bn corrective package to hold the deficit down to its targeted 5.9 per cent of GDP.

get would be seeking to find L30,000bn to L35,000bn next year to reduce the deficit to around 4 per cent of GDP. This would be similar to the size of this year's original budget. Last week the new government was obliged to introduce a L16,000bn corrective package to hold the deficit down to its targeted 5.9 per cent of GDP.

in order and push the country towards complying with Maastricht convergence criteria, the Bank of Italy has yet to reduce its discount rate. Economists said yesterday that this signal of approval comes from the central bank, the new government team will be unable to relax.

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Uncertain future for large European aircraft

A multi-billion dollar programme to develop a European military transport aircraft has been lumbering along for eight years, and some are now beginning to suspect that it will never get airborne.

Budget problems mean that military transporter project, once viewed as vital, may never get off the ground, write Bernard Gray, David Buchan and Michael Lindemann

in Airbus, the programme would help bind the European defence industry closer together. With European countries needing about 300 such aircraft, and with substantial export prospects, the programme could also be a commercial success.

Britain, Germany, France and several other European countries will need military transporters in the next decade. And all agree that rapid reaction forces will be needed in the next century and aircraft will be required to meet those needs.

and its involvement in the programme. Under pressure from Germany, it has since been looking for alternative ways to fund the aircraft.

be impossible for the government to commit itself to a sufficiently firm number, price and specification for the aircraft to make the deal bankable.

Mr Francois Anquet, Aerospatiale's finance director, said last week that "the [French] state would need to commit itself irrevocably to buying a fixed number of planes, at a fixed price, at a fixed date, linked to penalties if these commitments were not kept".

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Even the name of the aircraft is undecided: some are now calling it the Future Transport Aircraft because they are no longer sure it will be large. As a result, what is supposed to be an important European project is in a sorry state. Britain's position is that it will join the programme if it is

managed on a commercial basis by the Airbus consortium. Unfortunately it does not have sufficient money in its long-term budgets to pay for development and purchase of the 45 aircraft it says it wants. Nevertheless, after some initial complaints, the other partners have accepted Britain's idea, not least because commercial development seems to

be the only way the programme stands any chance of being funded: they now hope that firm commercial orders for aircraft deliveries will allow Airbus to borrow the money from banks. This approach is being most actively pursued in France. In its spring defence review, France stopped funding for the FLA, in effect threatening to

With Aerospatiale and many French banks still state-owned, it may just be possible to fudge a set of guarantees which would not bear strict commercial evaluation, but would be enough to get the funding off the government's books. It is harder to see such an approach working in Germany. Daimler-Benz Aerospace is a private company, and it may



A computer simulation of the FLA. Several European countries will need new military transporters in the next few years

Handwritten Arabic text at the bottom of the page.



# Bosnia wins go-ahead for elections

By Laura Silber, Balkans Correspondent

The head of the Organisation for Security and Co-operation in Europe (OSCE) yesterday gave the go-ahead for Bosnia's first post-war elections to take place on September 14.

Mr Flavio Cotti, the Swiss foreign minister, who holds the OSCE chair, told the OSCE permanent council: "The decision to give the green light for the elections, and I say this to you in all frankness, has been anything but easy."

Despite numerous violations of the Dayton peace accords, Mr Cotti was under intense pressure, in particular from the US, to certify elections could be held within the time period outlined by the year-long Dayton agreement.

All three sides have failed to respect freedom of movement and allow the return of refugees.

Mr Cotti's announcement coincided with remarks from a senior Bosnian Serb official signalling that Mr Radovan Karadzic, the Bosnian Serb leader wanted on war crimes charges, would soon resign.

Mr Momcilo Krajcinik, Speaker of the Bosnian Serb assembly, yesterday said the Bosnian Serb leader "would sacrifice his power if that is in the interest of the Serb people."

"There are certain warnings that every rational party should listen to," he said after talks with Mr Carl Bildt, the High Representative who is

responsible for the civilian side of the Dayton accords.

International mediators have threatened to re-impose sanctions on Serb-led Yugoslavia unless Mr Karadzic disappears from the political scene.

The presence of Mr Karadzic is seen as a major obstacle to holding free and fair elections in Bosnia.

Under the Dayton plan, war criminals indicted by the international tribunal cannot hold public office and should be handed over to The Hague.

In Pale, Mr Karadzic's mountain stronghold in northern Bosnia, Mr Bildt said he was not seeking the immediate renewal of sanctions. "We mean serious business when it comes to the peace agreement. This is not a piece of paper to be treated like nothing."

Mr Cotti yesterday added his voice to calls for the resignation of Mr Karadzic. "If the elections are to be effective, then every single possibility of direct or indirect exertion of influence by indicted war criminals like Radovan Karadzic must be hindered," he said.

"He provokes the signatories to the peace agreement and indeed the entire world by flaunting his freedom of action," he added.

Mr Cotti urged international organisations to work to establish the "minimum conditions" so democratic elections could take place. "The prerequisites... have not been fulfilled," he said.

# Poland offers Ukraine a view to the west

Matthew Kaminski on neighbourly support for an attempt to shake off Kiev's strong bonds to Moscow

Ukrainian President Leonid Kuchma, a frequent flyer to Moscow, yesterday began his second visit to Poland in just three weeks, underlining a shift in Ukrainian foreign policy from east to west.

Ukraine is vigorously trying to recast itself as a central European country eager for membership of the western world's elite clubs and wary of the options for co-operation offered by a Russia caught up in presidential election politics.

A public tilt toward a European, liberal and independent future for Ukraine would fulfil the best-case hopes for regional stability drawn up by western strategists concerned that the country might revert to Russian domination or break-up in civil war. And a rapprochement between Kiev and Warsaw would bring together eastern Europe's two largest countries.

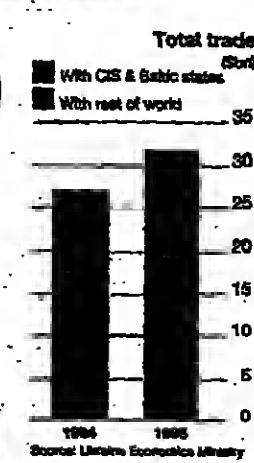
Poland's President Aleksander Kwasniewski this month won praise from the west for extending Mr Kuchma an unprecedented invitation to an annual summit of central European presidents held in Lanut, a Polish medieval city. There, Mr Kuchma declared clearly, for the first time, that Kiev wanted to join the European Union.

He called for the EU to start negotiations on a free trade area on time in 1996. He also said Ukraine wanted to strengthen ties with Nato - short of membership - and quickly to join the World Trade Organisation and the Central European Free Trade Area. And yesterday President Kwasniewski pledged Polish support for Kiev's bid to join the latter.

"Does the exclusion of Ukraine's 52m people from Europe make sense, Mr Kuchma asked a Warsaw weekly, *Polityka*, after the summit. "I reckon Europe is too small to give up on us easily. And, in fact, Ukraine was always in Europe, and history forces us to remember this." Poland has welcomed Kiev's adoption of an internal reform programme and policy of deepening ties with the west as the key to creating a strong buffer against Russia.

"It is all the more significant because if Ukraine becomes truly independent and European, then the chances that Russia will do the same, rather than revert to great empire tendencies, are all the greater," said Mr Janusz Onyszkiewicz, former Polish defence minister. The two are unlikely allies. Poland in the past has violently blunted Ukrainian

Ukraine: trade with west expands



national ambitions. But Poland's break from the Soviet bloc gave impetus to the non-Russian republic's freedom movements. Warsaw was first to recognise Ukraine's independence. The current borders, created when Stalin moved Poland 200km west, were acknowledged the following year.

Political contacts are catching up with the first symbolic acts, in spite of occasional flare-ups over Polish Catholic missionaries in Ukraine or unresolved tensions stemming

from the post-war fate of the Ukrainian minority in Poland.

Mr Andrzej Olechowski, a former Polish foreign minister, this month signed a joint declaration with Kuchma, the Ukrainian independence movement, to step up inter-government contacts and hold more joint military exercises.

"Leave the history to the historians," said Mr Hennady Udovenko, Ukrainian foreign minister, who has been ambassador to Warsaw. "Our relations with Poland are developing very quickly."

Trade has picked up too, from \$189.4m in 1993 to \$714.6m last year (still only 2 per cent of all Ukrainian trade), but the statistics fail to include a lively cross border "shuttle trade" in consumer goods.

Warsaw lobbied for Ukrainian membership in the Council of Europe last year and this month in the Central European Initiative, another regional forum. But Polish support might be limited by concern in Warsaw that entanglement in Ukraine might jeopardise its own aspiration for EU membership.

Ukraine's ambitions at the EU may be hard to realise. It was the first former Soviet state, after the Baltics, to sign a partnership and co-operation agreement with the EU in 1994, but remains one of eastern Europe's poorest and least reformed countries.

As a result, the free trade agreement sought in two years might not make economic sense. Mr Udovenko's call for associated membership, which implies eventual membership in the EU, "is quite a long way away," an EU official said.

Paradoxically, Mr Kuchma, a Soviet-era industrial boss, won office in 1994 promising to "integrate" Ukraine with Russia. But, exhibiting the independent streak of past Ukrai-

nian leaders that led anxious Tsars and party secretaries in Moscow to crack down on their unruly southern province, Mr Kuchma has been a strong defender of Ukrainian sovereignty.

The broad western backing buoyed Mr Kuchma. In a speech before the Western European Parliamentary Assembly in Paris this month, he said financial and political support from abroad ensured Ukraine would not "disappear from the political map of Europe". But he cautioned: "It is not possible to build a system of security in Europe without Russia."

The unstated threat to stability, in Ukrainian eyes, remains Russia. Mr Udovenko expects increasing Russian pressure on Ukraine for closer political and military links regardless of who wins the Russian elections next week. He said Ukraine wants to "integrate" with Europe and enjoy "good normal relations" with Russia - a semantic about-face for Ukraine since last year.

Ukraine's initial ambivalence about its future has been clarified. But the choice may not be theirs entirely. Many Russian analysts believe the Ukrainian elite will naturally gravitate back to Moscow, for the economic and cultural bonds are too strong to break.

# French jobless rate near record

By David Owen in Paris

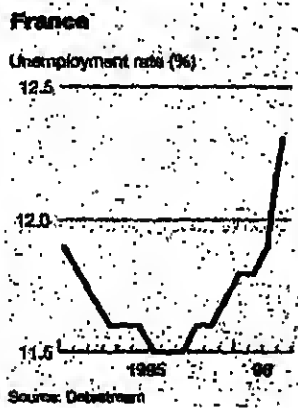
The French government suffered a new setback yesterday when it emerged that unemployment had risen to within a whisker of its highest ever level.

New figures released by Insee, the national statistics institute, put the number of people out of work in April at 3.165m - just 11,000 less than the record of 3.156m set in March 1994. This put the unemployment rate at 12.3 per cent, among the highest in the G7 group of industrialised nations.

The worrying news on unemployment coincided with release of separate figures showing household consumption fell in May for the fourth consecutive month. The rate of decline, however, slowed significantly to just 0.1 per cent from a downward revised 1.5 per cent in April. Insee said the marginal nature of the latest fall indicated that consumption was stabilising.

Taken together, yesterday's figures underlined the difficulty of the task facing the government of Prime Minister Alain Juppé as it seeks to stimulate growth while keeping public spending under tight control. Although gross domestic product grew by 1.2 per cent in the first quarter, analysts predict a reversion to close to zero growth in the three months just drawing to a close.

Mr Juppé recently resorted to the promise of future income tax cuts in an effort to encourage consumers to spend more. But the new unemployment figures will reinforce analysts' expectations that such spending is likely to remain subdued for the foreseeable



future, especially at a time when scarcely a week passes without the announcement of large-scale job losses in one sector or another.

Yesterday's figures came as Mr Jacques Barrot, labour minister, suggested that France's system of unemployment benefit should be structured so as to encourage the jobless to look for work more actively.

Meanwhile, the government also confirmed that France's minimum wage - the "smic" - would be increased by 0.5 per cent from July 1. This will carry the net monthly minimum salary over the FFrs,000 (\$965) threshold from FFrs,992.99 at present.

The 12.3 per cent unemployment rate released yesterday compared with a previous estimate of 11.9 per cent and followed an annual household survey conducted in March. The survey used international labour standard methods of calculation and, as such, differs slightly from French labour ministry data showing the number of job seekers.

# Banker refused entry to Russia

By John Thornhill in Moscow

Mr Boris Jordan, the best known foreign banker in Russia, has been denied re-entry to the country after his visa was stripped from him when leaving Moscow airport in May.

The move has unsettled foreign investors in Moscow who fear it is directly linked to a shareholder tussle at one of Russia's biggest industrial plants.

Many Russian company directors, who are often former Communist party members with good contacts in Moscow, still view outside investors with hostility. There are few legal mechanisms for enforcing shareholder rights.

The investment bank Mr Jordan heads, Renaissance Capital, has recently been in confrontation with the Soviet-era managers of the Novolipetsk

Metallurgical Kombinat after the bank acquired a 24 per cent stake in the metals plant and pressed for more financial information to be disclosed and auditors to be appointed.

Mr Jordan had been trying to assert the shareholder rights of investors, who collectively own 44 per cent of Novolipetsk's equity.

"There is no legitimate reason for Boris to lose his visa so the most likely conclusion is that one of the 'red directors' of the plants in which Renaissance is involved in a contentious restructuring has put an obstacle in Boris's path," a bank official said.

Russian officials have refused to explain why Mr Jordan's visa was revoked. But the Renaissance bank official said Mr Jordan was hopeful of receiving a new visa once political tensions eased after next week's presidential elections.

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NEWS: INTERNATIONAL

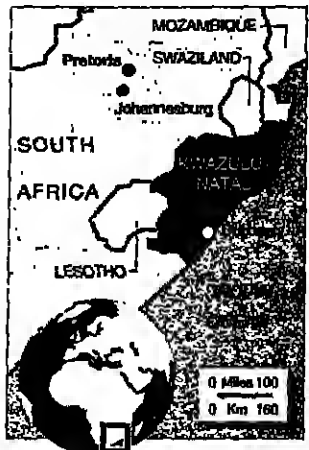
# Zulu heartland yields to death and democracy

The derelict school at Shabashobane, a hilltop village on the south coast of KwaZulu Natal, will be busy today for the first time this year. Villagers hope its revival as a polling station in the province's long-awaited local elections will herald the return of the teachers who fled seven months ago in fear of their lives.

The past is a rite of passage for a province uniquely burdened by African feudalism and the legacy of apartheid. Since the massacre of 19 residents on Christmas Day last year, Shabashobane has symbolised the carnage of the low intensity warfare that claims 50 lives a week in the province. The survivors are under 24-hour police protection. The dead are buried under concrete to prevent desecration of their graves by residents of neighbouring valleys.

Over recent months many of the province's 3.5m voters have had a first taste of electioneering - an experience curtailed in April 1994 when the Inkatha Freedom party threatened to boycott the all-race general election until the week of the poll.

Most of South Africa voted last November for new local councils to integrate administratively white towns and cities and the poor black town-



ships on their outskirts. It was the final tier of apartheid government to go, but boundary disputes and recurrent violence brought two postponements in KwaZulu Natal.

For many voters, the campaign has brought little cause for optimism. News of a peace initiative led by rival leaders of the ANC, which dominates the national government, and Inkatha, which won a slim majority in the province in 1994, is greeted with scepticism in Shabashobane.

An ANC fiefdom in the heart of an area loyal to Inkatha, Shabashobane has become a permanent refugee camp.

In most parts of the province, the conflict between factions aligned to the ANC or Inkatha has little to do with policy. Shabashobane was traditionally an Inkatha area, until a dispute over the succession to a local fiefdom enabled the ANC to gain a foothold. "It makes little difference which party dominates a region, because all it takes is a chink in the community and their opponents will move in and open a local branch," says Mr Nicholas Claude, a researcher at the University of Natal.

The spirit of political plural-

ism that swept South Africa in 1994 election has made little impact on KwaZulu Natal, which remains the only part of the country where elected politicians still dispute the case for democratic government.

This is due largely to the entrenched tribal loyalties in rural areas, where Inkatha-aligned chiefs perceive democratic local government as a threat to their authority.

Their animosity to the ANC dates from the period when the ANC was outlawed and Inkatha built solid support among chiefs fearful of the organisation's socialist agenda at the time. ANC members point out that many such chiefs are autocratic and corrupt.

In an attempt to defuse these tensions, the government has transferred the payment of chiefs' annual salaries away from the provincial government to the national coffers. But the ploy has not placated the chiefs. "When you've got massive poverty, huge areas, lack of development, it becomes hugely problematic to replace tribal authority with elected officials," says Mr Walter Felgate, a national MP and Inkatha's chief constitutional negotiator.

Similar concerns exist among tribes in other provinces, but they are inflamed in KwaZulu Natal by the history of conflict with the ANC and the warmongering traits of many local leaders.

In Bhambany, a densely populated squatter camp 30km from Durban comprising not only Zulus but a variety of black ethnic groups, the local ANC and Inkatha groupings last week reacted angrily to the sight of politicians from other areas electioneering on their streets. It would, they said, jeopardise a R12m (\$2.75m) development project that has brought running water, better roads and tentative peace to the township.

Since the project began, the killing, which has claimed 700 lives since 1992, has subsided from its 1993 peak when a quarrel among local drug dealers brought ANC-supporting youths into conflict with gangsters nominally aligned to Inkatha. Their truce, says Anne McKay, who offers weekly counselling to the survivors of violence, is based on the knowledge that "if violence erupts again, they will lose everything".

"We are limping towards peace," she says.

However, attempts to accommodate tribal tradition in the election have compromised the principle of one man, one vote while granting special privileges to minority groups.

On the six regional councils, 20 per cent of seats have been reserved for tribal chiefs, and a further 10 per cent for white, rate-paying landowners.

In metropolitan areas, "transitional arrangements" agreed prior to the April 1994 election allow predominantly white suburbs to elect the same number of councillors as the overcrowded black townships.

Disputes over the merits of this mangled version of democracy are set to continue long after today's poll.

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Mark Ashurst

# Germany isolated over IMF gold sales

By Robert Chote, Economics Editor

Germany is alone among the Group of Seven leading industrial nations in remaining firmly opposed to the sale and reinvestment of International Monetary Fund gold to help fund debt relief for poor countries, senior G7 finance ministry officials said yesterday.

Debt relief will be a significant theme at the G7 summit which gets under way in Lyons tomorrow. The French hosts are hoping for a breakthrough

on gold sales - to which they were initially opposed - as a centrepiece of the meeting.

Officials said Italy and Japan had both indicated they might be prepared reluctantly to consider gold sales. Investing the proceeds of gold sales could pay to put the IMF's concessional lending facility on a permanent footing and to extend the maturity of these concessional loans as the IMF's contribution to the joint debt relief initiative it is drawing up with the World Bank.

The World Bank's board has

already agreed informally to allocate \$500m to the debt relief initiative in financial 1996 and \$200m a year thereafter in a "firm and almost open ended commitment".

But German government officials said yesterday they were still opposed to gold sales to fund the IMF's contribution. Germany believes the IMF's plan to sell \$2bn of its \$40bn gold reserves would set an undesirable precedent, and that it is dangerous when the IMF has been lending heavily to Mexico and Russia.

Officials fear the summit may now end in a stalemate on debt relief. Germany will argue that it is prepared to offer fresh bilateral money, but not to sell IMF gold. The US and UK are in favour of gold sales, but against further bilateral contributions.

The US came under attack from both France and Germany yesterday on its attitude to debt and aid issues. German officials said the G7 process was coming under strain because financial burdens were not being shared fairly. They

singled out the US's \$1.5bn arrears to international financial institutions.

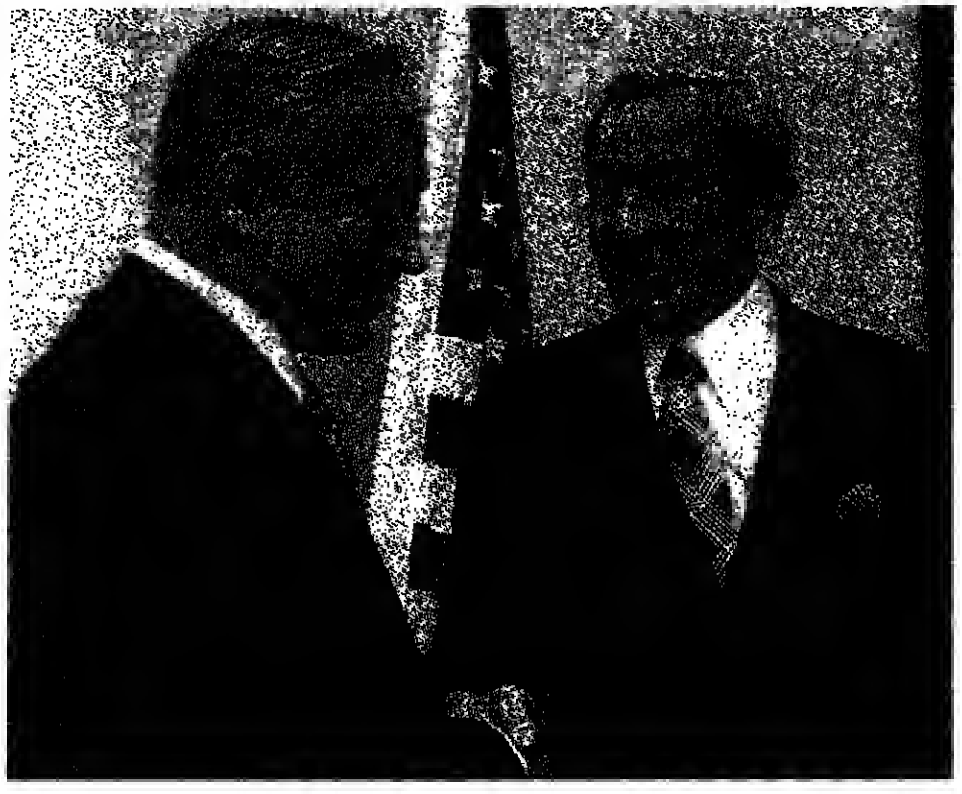
But President Clinton is likely to point out that the administration has been committed to funding operations such as the World Bank's soft-loan arm, the International Development Association, but that the money has been blocked by congress.

Officials at the World Bank and IMF hope that, notwithstanding these disagreements, the G7 will be able to give clear direction to the Paris Club of

creditor governments on the size of the contribution it should make to the World Bank/IMF debt initiative.

Paris Club members appear to be edging to a compromise under which the 67 per cent relief on eligible debt offered under the so-called "Naples terms" could be increased to the equivalent of 80 per cent.

But rather than raising the percentage relief offered, this might be achieved by extending the definition of eligible debt to which relief was applied.



## Netanyahu remains vague on peace deal

Mr Benjamin Netanyahu, Israel's prime minister (above left), yesterday left Mr Warren Christopher, US secretary of state (right), guessing about his commitment to international Middle East peace accords and the US-backed framework of negotiations, writes Julian Ozanne in Jerusalem.

During Mr Christopher's first visit to Israel since Mr Netanyahu's victory in elections last month the new prime minister refused to give a commitment that his government would honour Israel's promise to pull troops out of the Israeli-occupied West Bank town of Hebron, a flashpoint of Arab-Jewish violence.

He also remained vague about his government's willingness to deal directly with Mr Yasser Arafat, president of the Palestinian Authority and, according to officials, he told Mr Christopher he wanted to review the framework of Israel's negotiations with Syria.

Mr Christopher's visit followed a weekend Arab summit in Cairo which warned Israel against deviating from the land-for-peace principle and came ahead of Mr Netanyahu's first visit to Washington as prime minister next week.

Editorial Comment, Page 13

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Editorial Comment, Page 13

# Global privatisation may raise up to \$85bn in 1996

By Richard Lapper, Capital Markets Editor, in London

Receipts from global privatisation issues are expected this year to surge to their highest ever levels, according to a report published yesterday by the Organisation for Economic Co-operation and Development (OECD). The report says that issuance could rise to as high as \$85bn, compared with \$62.3bn in 1995 and \$69.1bn in 1994.

The governments of OECD countries have raised more than \$8bn in the first four months of 1996 but are expected to raise up to \$60bn for the year as a whole. The report says that buoyant conditions in international equity markets, coupled with relatively stable macro-economic conditions, provide a favourable environment for offerings.

It expects heavy issuance

from Germany, where the government is expected to raise \$10bn from new shares in Deutsche Telekom, predicting overall proceeds for Germany of \$16.5 bn. France and Italy are also expected to be very active, with proceeds of \$4.5bn and \$6.3bn respectively. Issuance from Japan is expected to reach \$6.3bn, from the UK \$4.4bn and from Australia \$4.9bn.

Countries from outside the OECD are expected to raise up to \$25bn, with the sharpest rise in Latin America, where an issue of more than \$1bn by Telefonica del Peru, the Peruvian telecommunications company, is expected to come to the market shortly.

However, the report warns that "in view of experience thus far this year, governments in these countries will have to intensify their privatisation efforts considerably if their ambitious targets for 1996

are to be achieved". The report says that international investors have become increasingly important buyers of privatisation stocks. Last year they bought 50 per cent of stock issues, compared with only 33 per cent in 1993 and 1994, although the percentage this year is expected to fall to 40 per cent.

It says "policy makers and academics have slowly become convinced that state ownership tends to lower internal efficiency of companies in product markets". The biggest problem could well be the sheer scale and number of privatisations. "Probably the largest cloud on the horizon is the sheer amount of new privatisation equity coming to the market."

*Financial Markets Trends June 1996 OECD, 2 rue André Pascal, 75775 Paris, Cedex 18. Financial Markets Trends subscription FF7200 in France. All other countries \$67.*

## Pakistan denounces India on test ban

By Frances Williams in Geneva

Pakistan yesterday denounced India's declaration last week that it would not sign a nuclear test ban pact as now drafted, warning that the decision "could spell the death-knell of the treaty".

Mr Munir Akram, Pakistan's ambassador to the treaty talks, insisted the accord could not come into force until ratified by the five official nuclear weapons states - the US, Russia, Britain, France and China - as well as Israel, India and Pakistan, the three "threshold" states.

This condition - also backed by Britain, Russia and China - has raised fears that the pact, even if agreed, may never be operational. Most other nations, including the US, support a proposal by Mr Jaap Ramaker, the Dutch chairman of the negotiations, for a "waiver" that would in the last resort allow the treaty to come into force without one or more of the eight.

Addressing the 61-strong United Nations disarmament conference, which is racing to finalise the treaty by Friday, Mr Akram said this approach ignored "fundamental strategic and political realities". "To those who live in the 'real world', it is clear that if one of these states is out of the treaty, all of them will be out," he said. A treaty without one or more of the nuclear-capable countries would be "a farce".

The present draft pact requires all 37 states with planned nuclear test monitoring stations on their territory to ratify before entry into force. These include the eight nuclear and threshold countries.

However, India which objects to any entry-into-force conditions requiring it to ratify, served notice on Monday that it would not participate in the monitoring arrangements if it did not sign the treaty.

Mr Akram said yesterday that instead of looking for "waiver" solutions negotiators should be trying to bring India on board by strengthening language on disarmament.

New Delhi said last week it could not subscribe to the draft treaty because of "weak and woefully inadequate" references to nuclear disarmament.

But western diplomats say there is no chance whatever that India's demand for a treaty commitment to eliminate atomic weapons within a fixed time-frame will be agreed by the nuclear powers.

## UK team heads for Tokyo in copper probe

By Jimmy Burns and Norma Cohen in London

A three-man team from Britain's Serious Fraud Office flies to Japan today to step up the investigation into the Sumitomo copper affair.

The main purpose of the trip will be to establish a close working relationship with their counterparts in Japan's special prosecutor's office. The SFO investigators do not intend to interview Mr Yasuo Hamanaka, Sumitomo Corporation's former chief copper trader, on this trip.

The SFO does not have any powers at this stage to interview individuals linked to the affair, but is looking to see if there is any evidence that huge losses incurred by Sumitomo involved fraud in its operations in the UK of London.

The UK investigators are seeking access to the trading records of Sumitomo in an effort to discover the identities of the counterparties to trades in the UK arranged by Mr Hamanaka which led to at least \$1.8bn - and perhaps as much as \$4bn - in losses for the metals trading company.

The SFO team is led by a senior lawyer, Mr Andrew Jackson. He will be accompanied by Mr Michael O'Brien Kenney, a forensic accountant, and Detective Chief Inspector Mick Fox, from the City of London police fraud squad.

The US Commission Futures Trading Commission was also sending two staff members to Tokyo last night.

The three men are expected to interview Sumitomo's counterparties to learn more about the terms of certain transactions.

Regulators suspect that Mr Hamanaka was able to hide the losses from his superiors partly because Japanese accounting rules do not require that positions be "marked to market". That is, they are not required to disclose the value of each commitment to buy or sell copper as though that commitment had to be honoured immediately. However, what is shown in the accounts as profits are the cash premiums raised from the sale of options. It is understood that Mr Hamanaka heavily sold "put" options for cash which gave counterparties the right to put copper to him at a set price at some point in the future.

In order to ensure that the option not only raised cash but was profitable as well, he "would have had to ensure that copper prices moved so that the option would be out of the money at the time the option expired", according to one copper market regulator.

Regulators are understood to be investigating whether copper prices had been manipulated by a group of individuals for personal profit.

After rallying yesterday morning, copper prices fell back in after-hours trading on the London Metal Exchange to reach a new 2 1/2 year low of \$1.775. In Tokyo, Sumitomo shares closed at a 1996 low, falling ¥20 to ¥880.

# Oil price alert on Saudi state finances

Robin Allen on the likely end to a revenue bonus

The return to world markets of Iraqi oil in the next few months threatens to bring prices down and disrupt the finances of the world's biggest oil exporter, Saudi Arabia.

Home to a quarter of proven global oil reserves, Saudi Arabia has this year earned between \$2bn and \$5bn in extra revenue from selling oil at \$18 to \$19 a barrel, well above the \$14 a barrel on which its 1996 budget revenues were based.

But since the Organisation for Petroleum Exporting Countries failed at its meeting in Vienna earlier this month to make room for the Iraqi sales by limiting overall production, many market analysts have been predicting a substantial drop in oil prices. The London-based Centre for Global Energy Studies (CGES) has forecast that prices might fall in the second half of this year to around \$16 a barrel in the third quarter and about \$13 in the fourth, even with growing demand in the industrial countries. Oil income provides some 75 per cent of Saudi Arabia's annual budget revenue.

Some economists and diplomats in Riyadh say the extra

cash reaped from buoyant oil prices has had little impact on domestic debt, fuelled by accumulated budget deficits and the government's failure to cut state subsidies.

Others agree with Saudi American Bank's chief economist Mr Kevin Tacker, writing in the bank's June Economic Outlook: "... world commercial stocks are low and consumption is rising rapidly in Asia, particularly in China, so that oil prices are likely to rise, even if prices head lower, it seems unlikely that Saudi Arabia's average price for 1996 will be much below \$17 a barrel. Prospects are good for the current account to come into balance in 1996."

But even these "optimists" point to critical structural imbalances in the country's economy, and all agree that "no one seems to know where this year's extra oil revenue has gone", as one senior diplomat put it.

Last year, when there was an actual budget deficit of \$4bn, just over 3 per cent of gross domestic product, was the 13th consecutive year of both budget and current account deficits. Real growth in GDP last year was less than 1 per cent for the third year in a row.

Increasing numbers of foreign workers means expatriate remittances are likely to be more than the \$15bn reckoned by the International Monetary Fund to have left the country for each of the last four years.

The government continues to try to disguise the scale of fundamental economic weaknesses by making arbitrary claims or issuing selected budget and other figures.

An example is the government's claim of a 7.5 per cent growth last year in the non-oil private sector. Diplomats point out this assertion is based largely on another impressive performance by Saudi Basic Industries Corporation (Sabic), the petrochemicals giant. Sabic however is neither private sector nor non-oil. It is 70 per cent owned by the government and it depends for its very existence and all its fuel and feedstock on Saudi Arabia's oil industry.

In other cases, such as defence expenditure and the share of oil revenue withheld by the ruling family, the government issues no figures. However, thanks in part to the IMF, it is now easier to "pull the veil off Saudi public finance", as one western diplo-

mat put it.

This year the deficit is projected at \$5bn. To limit the deficit to this level, the government has pruned expenditure on defence and security by 8.3 per cent compared with last year, to \$12.1bn.

Allocations for municipalities and water have also been cut, although "according to finance ministry data, water consumption is rising at an average annual rate of nearly 9 per cent", writes Mr Tacker. "At that rate, water consumption will double every eight years. For lack of payments for past work and future financing, vital projects face delays."

In April and May the government made a second, SR6bn (\$1.6bn), bond issue to settle overdue debts to state contractors and suppliers.

Total domestic debt is now put at some \$100bn, nearly 80 per cent of GDP. "The government pays close attention to this debt ratio," commented a senior diplomat last week. The IMF recommends a 60 per cent debt-to-GDP ratio.

"The difficulty for the Saudis," another diplomat said, "is that short of a buoyant oil market, there are no other immediate ways of increasing revenue." This is partly because some 50 per cent of annual

budget revenue goes to meet the public sector wage bill alone.

Meanwhile, Saudi officials at the Opec meeting earlier this month were adamant that pessimistic oil price forecasts fall to take account of a number of positive factors that could underpin oil markets for much of the rest of the year.

They believe, for example, that oil demand in the buoyant Asian economies is higher than that recorded in official statistics. The reason, they say, is that the "black or underground economy in many Asian states is not reflected in official growth figures".

## INTERNATIONAL NEWS DIGEST

# WHO warning on TB drugs

The World Health Organisation yesterday warned that the misuse of drugs to treat tuberculosis in South Africa could result in the spread of a new and incurable epidemic to continental Africa and the developed world.

"If we don't act now, we will have a situation that we can't control," said Dr Donald Enarson, a director of the Paris-based International Union Against TB and Lung Disease. "There is no doubt that in the cabins of aeroplanes we are all at risk."

In a report released yesterday, the WHO found the spread of infection has been accelerated by the country's Aids epidemic, which weakens the immune systems of people exposed to airborne bacteria.

The accelerator effect of the HIV virus increases the likelihood of contracting airborne tuberculosis bacteria by a factor of 30. In South Africa, tuberculosis accounted for more than 80 per cent of recorded incidents of communicable disease in 1995. If current trends continue, the incidence of the disease will almost double from 1.7m cases to 3.5m within 10 years.

Mark Ashurst, Johannesburg

## UK proposes improved links between global regulators

The UK will propose a scheme to improve co-ordination between national regulators of global financial institutions at this week's summit of the Group of Seven leading industrial nations in Lyons, France.

Many international financial businesses are now subject to scrutiny by a large number of regulators in different countries. The UK proposal would see a "convening regulator" appointed for each business, which would be responsible for initiating and co-ordinating the response of all the affected regulators in the event of a crisis. The Bank of England would probably be convening regulator for NatWest Group, for example.

"It would be helpful to have one national regulator recognised as *primus inter pares*," a senior UK official said yesterday. But he added that each regulator would retain its existing legal responsibilities. The UK hopes the G7 will agree to commission further work on the proposal at the summit.

Robert Chote, London

## Burundi president and PM call for help to end tribal warfare

Burundi's president and prime minister yesterday put aside their ethnic differences and called for help in ending the tribal fighting that has killed 150,000 people.

It was the first time the government, which had pledged not to ask for outside help, spoke in unison on ending violence between the country's army, dominated by minority Tutsis, and rebels of the majority Hutu.

"We have said that we are not for an intervention force imposed from the outside," said Mr Antoine Nduwayo, the Tutsi prime minister. "But... we have identified needs that are great, and the government of Burundi is requesting this assistance."

President Sylvestre Ntibantunganya, a Hutu, told reporters after a summit meeting of regional leaders: "There is a strong will that the violence that we have known in Burundi has got to stop." Neither Mr Ntibantunganya nor Mr Nduwayo would provide details about the requested aid.

AP, Arusha



## Brazil's banking 'riskiest in region'

By Stephen Fidler, Latin America Editor

Brazil has the riskiest of all the main Latin American banking systems, according to a report issued this week by the US credit rating agency Standard & Poor's.

The report, which is likely to be strongly disputed in Brazil, says: "Investors, counterparties and large depositors remain at risk when dealing with small banks in Brazil or banks with a weak financial profile and poor franchise value."

It adds: "There are fine banks in Brazil, although fewer than have regularly issued in the entomarkets." Among the top-tier banks named are Bradesco, Itaú and Unibanco.

Brazil's authorities have long maintained that, while the country has problem banks, there is no systemic problem. Standard & Poor's points out that, apart from that in Chile, the systemic risk in all Latin American banking systems is high.

Mr John Chambers, one of the authors of the report, said that, while the Mexican banking system might appear to be in a worse condition than Brazil's, Mexico was, unlike Brazil, at the trough of its credit cycle. "We wouldn't say that Brazil is in worse shape than Venezuela, but I guess we don't consider Venezuela to have a major banking system," he said.

The Brazilian system's weaknesses derive from several sources, the report says. There is no system as yet to grade loans and no shared national credit system, although the central bank is developing one.

Furthermore, among the main Latin American systems, Brazil alone still requires private sector banks to allocate a portion of certain liabilities to sectors deemed to be starved of capital.

High reserve requirements also discourage banks from seeking stable sources of funding.

## Dole takes initiative on TV poll plan

By Jurek Martin in Washington

Mr Bob Dole has stolen a march on President Bill Clinton by agreeing, with conditions, to a new proposal for presidential candidates to deliver short political speeches on free time donated by the TV networks immediately before the November elections.

But the presumed Republican presidential candidate yesterday found himself under attack from Vice-President Al Gore for "sweeping under the rug" more widespread changes in the way US election campaigns are financed.

The Dole campaign accepted on Monday night the blueprint proposed by the Straight Talk Coalition, the lobby headed by Mr Walter Cronkite, the leg-

endary and now retired TV anchorman. Its aim is to reduce the impact of "sound bite" reporting of elections and negative TV political commercials by permitting candidates to address the public directly in prime evening viewing time.

Mr Dole would deliver 10 two and a half minute mini-speeches, to be broadcast on alternating nights in the final four weeks of the campaign. Mr Clinton has expressed interest in the proposal, which would also be open to Mr Ross Perot or the nominee of his Reform party, but he has yet formally to respond. The only important condition Mr Dole stipulated was that Mr Clinton not give his speeches from the White House Oval Office because that was

where "the president of the United States addresses the nation in times of national emergency".

All the major networks have agreed to the plan in principle, with details still to be arranged. Mr Dole and Mr Clinton are also expected to take part in at least one head-to-head televised debate, a feature of US campaigns since the Nixon-Kennedy series in 1960.

Mr Gore's criticism yesterday came as the Senate began debating another version of campaign finance reform, though the threat of a Republican filibuster left the bill with little chance of passage. Just over a year ago, Mr Clinton and Mr Newt Gingrich, the Speaker of the House of Representatives, had shaken hands and promised to deliver

within 12 months a reform bill that would lessen the influence of special interest money on political campaigns.

Mr Gore tartly remarked that Mr Dole clearly believed that "silence is golden because the less he says, the more special interest money he receives". That recalled Mr Gore's attack of last week when he accused Mr Dole of being in the pocket of the tobacco lobby.

The Senate bill, which has sponsors from both parties, does not propose the complete public financing of elections. But it recommends voluntary state-by-state spending limits and free TV time and would severely limit contributions by political action committees, the device used to skirt restrictions on individual campaign donations.

## New head of steam for a slow sell-off

Raymond Colitt analyses the prospects for companies in Venezuela's privatisation programme

With investor confidence rising, after the launch of an economic plan backed by the International Monetary Fund, the Venezuelan government says it is determined to restart its privatisation programme.

Privatisation was held up for more than two years by an unorthodox government and by an economic crisis which depressed Venezuelan asset prices and made privatisation unattractive.

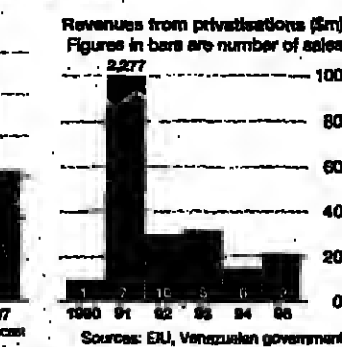
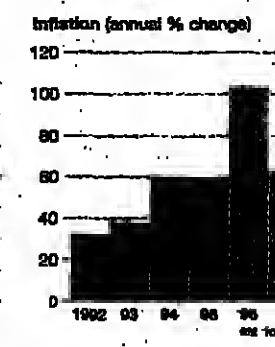
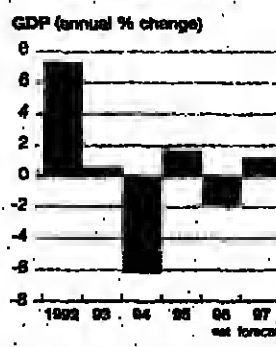
The delays have left more than a residue of scepticism. According to Mr Antonio Herrera of the Venezuelan-American Chamber of Commerce, "the privatisation plan has been delayed for so long that it lacks credibility until it actually happens."

However, a growing number of observers believe that the government's means business this time. Mr George Kastner, head of Arthur D. Little in Caracas, said: "Long-term investment conditions are improving and I'm very bullish in advising foreign investors about prospects for privatisation."

Government estimates suggest it could raise as much as \$3bn by year-end. The first step will be the sale of Banco de Venezuela, which fell into state hands with more than a dozen other banks after the 1994 banking crisis. Sofrine Consultants now ranks it third in terms of total deposits.

Mr Gilberto Carrasquero, Venezuela representative of Salomon Brothers, lead man-

### Venezuela: the economic framework for privatisation



ager in the bank's sale, says prequalification of interested buyers is under way. The base price will not be made public, in hope of boosting the bidding price. Bank officials say the bank has a book value of \$3bn (€1.9bn).

Most important in terms of potential revenues is the government's 49 per cent share in the telecommunications company, CANTV, of which a GTE-led consortium acquired a 40 per cent share in 1991 for \$1.89bn. Lehman Brothers and S.G. Warburg, acting as investment banks, are preparing financial and legal audits before a road show for potential investors in the autumn.

A first tranche of shares, about 34 per cent, is to be offered on domestic and international markets in the last quarter this year, when the government sees an opportunity between the sales of the

Peruvian and German telecommunications companies.

The government expects as much as \$2bn from the share package, proceeds of which will be used to pay off foreign debt, possibly that of the state aluminium companies so as to help their privatisation.

In 1994 and early-1995, CANTV had debt problems because of a shortage of foreign currency as well as low telephone tariffs. More recently the company has performed well, with a 1995 profit. Its debt to creditor banks was reduced by the end of last year. Mr Kastner says the company has also improved its services and labour relations. Already 11 per cent of the shares are in the hands of employees, who will have the option to buy another 9 per cent.

Officials of the privatisation entity, Fondo de Inversiones de Venezuela (FIV), are aware

that time to sell off the remaining stake in CANTV is running out. In 2000, CANTV's monopoly on fixed lines and long-distance telephone service is to run out.

Also slated for privatisation in the last quarter this year are four aluminium companies, part of the state industrial holding company Corporación Venezolana de Guayana (CVG).

Venezuela's low fuel costs and extensive infrastructure, along with strong international aluminium prices, make the sector (one of the most important annual exports of more than \$700m) attractive to potential foreign buyers.

Yet, while analysts see the sale of Banco de Venezuela and even CANTV before the end of the year as feasible, they have doubts about the aluminium complex's timetable. The four companies' high

debt, at some \$1.37bn, is a problem. It is still unclear whether - and, if so, how - the government will assume these liabilities. However, the FIV is discussing options with its advisers, the brokers Merrill Lynch, Mr Alberto Poletto. FIV head, said the government is determined to offer the companies in as good a condition as possible: "It's like selling a car - you're likely to get a better price if you change the tyres and give it a new coat of paint."

Opposition by entrenched bureaucrats could also delay the sale of CVG subsidiaries. "Everyone is in favour of privatisation until it begins to affect the privileges of certain people. I spend a good deal of my time trying to convince our opponents," said Mr Poletto.

Until a new legislative framework is in place some time next year, the planned sale of the two electricity utility companies, Enelven and Enelven, will not go ahead.

The privatisation of the steel concern, Sidor, and the iron concern, Fesivel, are also scheduled for next year. Even if privatisation does not advance according to the timetable, many analysts say there is no turning back.

Mr Pedro Palma, vice-president of Booz Allen & Hamilton, said: "The government realises that privatisation is the only way to reduce substantially the public debt service." This, he said, accounts for 7 per cent of gross domestic product.

Investment pledged by small investors totals the equivalent of some \$215m, latest available figures said.

## CEO pay rises average 23%

The pay of US chief executives continued to outpace that of the national workforce last year, with an average rise in total compensation of 23 per cent. This brought the average chief executive's remuneration - including base salary, bonus and stock options - to \$3.2m.

The latest annual survey by management consultants Towers Perrin said the median CEO base salary had risen 7 per cent to \$805,000, while the median bonus had gone up 16 per cent to \$723,000. Long-term incentive payments, consisting of stock awards such as options, were worth an average \$1.4m. Total incentive payments, including the annual bonus, made up 68 per cent of total compensation, compared to 55 per cent six years ago. The survey, based on the proxy statements of 230 companies, also showed a sharp rise in CEOs' ownership of stock in their own companies. On average, such holdings were worth eight times base salary, compared with five times two years ago.

## US consumer confidence down

US consumer confidence fell unexpectedly this month but remained higher than in June last year, figures indicated yesterday.

The Conference Board, a US business group based in New York, said its confidence index had fallen to 97.6 against 103.5 in May. This surprised Wall Street economists who had predicted little change, given recent reports of rapid employment growth and buoyant retail spending.

Some analysts said the decline was consistent with projections of slower economic growth in the second half of this year after a robust second quarter. But it may have just reflected the volatility of the index, which has fluctuated between 88 and 105 in the past six months. Historically a reading of 90 to 100 has indicated steady economic growth. Separate US figures yesterday showed a 1.4 per cent rise in sales of existing homes in May over April, higher than most analysts had expected.

## Alberta eases austerity

Alberta's conservative government has begun to loosen the purse strings after four years of fiscal austerity that has helped turn the oil-rich Canadian province's C\$3.4bn (US\$2.5bn) deficit into a C\$1.1bn surplus.

The surplus for the year ended March 30 was more than double original estimates, thanks largely to booming tax revenues from the oil and gas industry.

Based on a voter survey, the government will use most of the surplus to start paying down the province's debt. Mr Jim Dinning, provincial treasurer, said spending on health care and education would rise by extra C\$340m during the next two years.

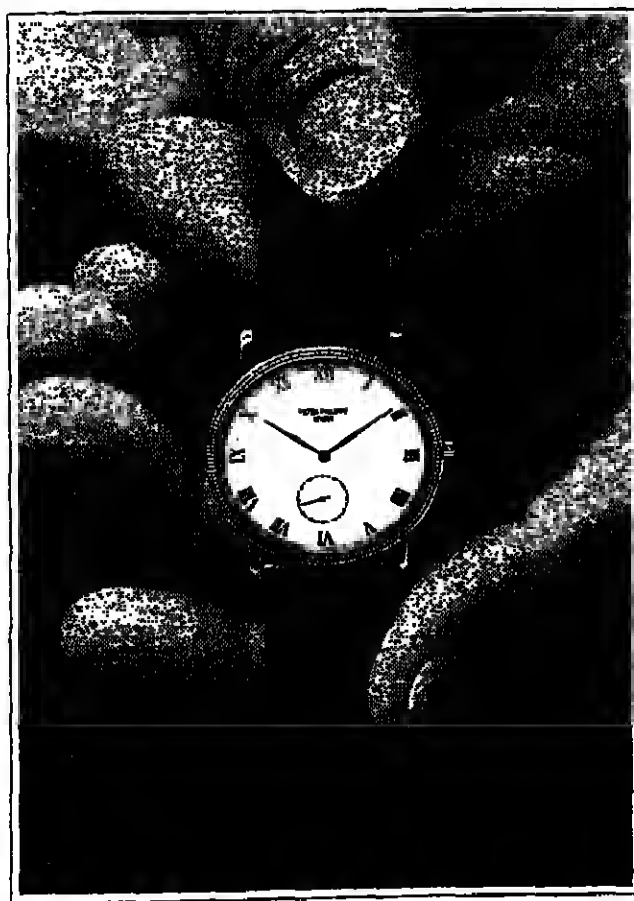
## Peruvians buy into telecoms

Peru's first big attempt at promoting popular capitalism seems to have been a success. By last weekend, and with only three days to go, almost 180,000 Peruvians had acquired packages of shares in the former state-owned telecommunications company, Telefonía del Perú, under a "citizen participation" mechanism, double the target figure.

Investment pledged by small investors totals the equivalent of some \$215m, latest available figures said.

The larger, international tranche of the Telefonía del Perú offering is being finalised by global co-ordinators JP Morgan and Merrill Lynch. The final offer price is to be announced on Monday.

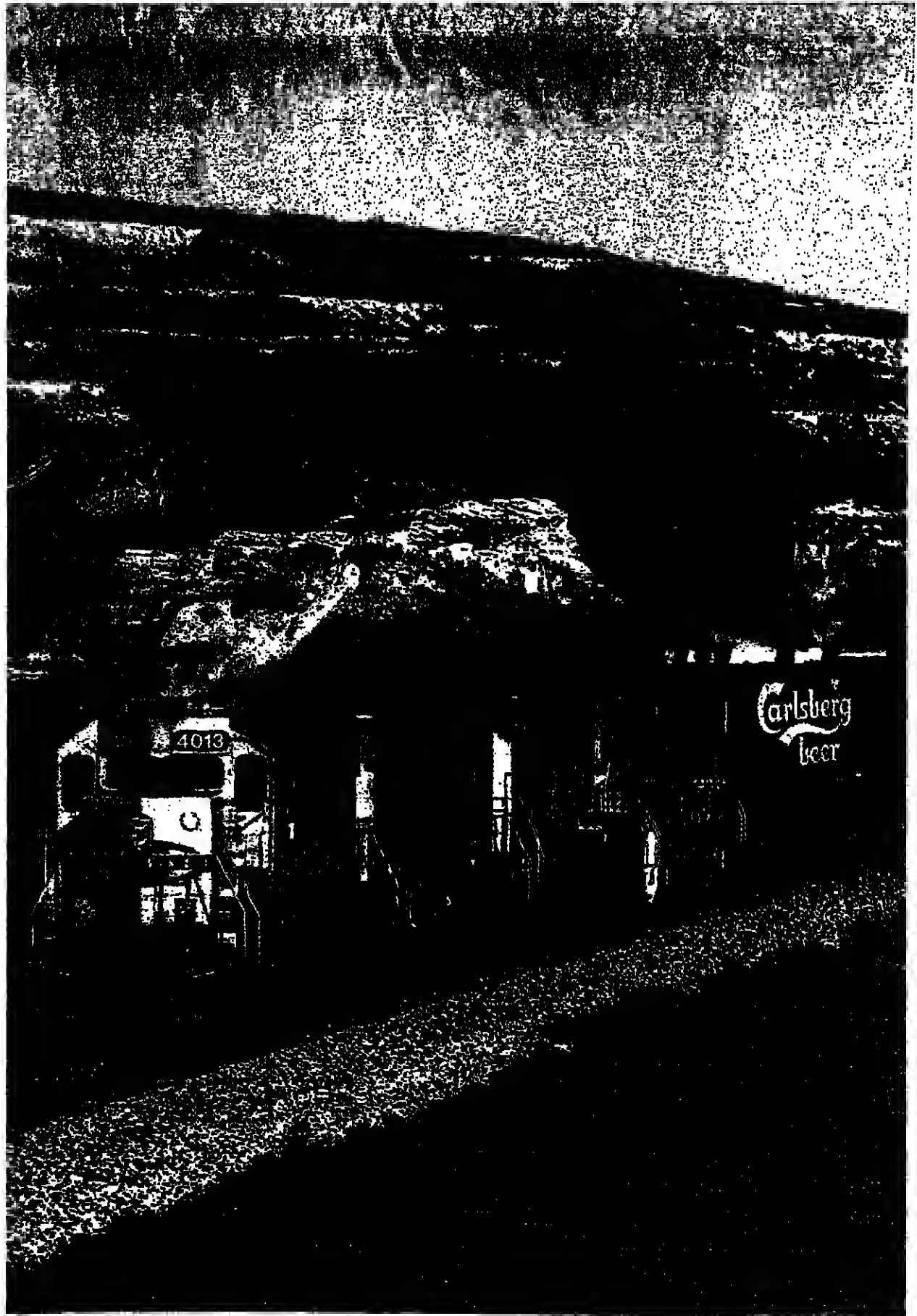
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# Chinese curb share trading

China has cracked down on local investors opening trading accounts in B-shares nominally reserved for foreigners, after a surge of domestic buying in Shenzhen stock exchange's B index. The exchange, one of two bourses in China, said yesterday it had banned domestic investors from opening new B share accounts. The move reflects concern about possible central government intervention. The Shenzhen market had risen by 60 per cent this year before sliding back yesterday. The Shanghai B market followed Shenzhen lower.

China A share markets are reserved for domestic investors, but locals have been increasingly putting their money in the B markets denominated in Hong Kong dollars in Shenzhen and US dollars in Shanghai. In Shanghai, local investors hold 25 per cent of B share stock, but are responsible for 50-60 per cent of daily trades. Percentages may be higher in Shenzhen. Chinese officials said locals holding B shares would not be obliged to liquidate their positions. An official of the Shenzhen securities management office said the decision to open the market to local investors was "an error". *Tony Walker, Beijing*

## Japan doubtful over jobs-for-life

Japan is seeing a sharp increase in the number of companies wanting to scrap jobs-for-life, according to a survey released yesterday. Over half a sample of 6,000 companies surveyed by the Japanese labour ministry say they no longer stick to the traditional system, a staple of Japan's relative social stability. This is a sharp increase on the 41.5 per cent making the same claim in a survey three years ago.

Larger companies are slightly less tough about "surplus labour" than smaller ones. Of businesses with 5,000 or more employees, 32 per cent wanted to scrap the lifetime rule. Over half of companies with fewer than 300 workers said they wanted to be free to sack people. *William Dawkins, Tokyo*

## Protests over consul's death

Burma's military regime is being called on to explain the death of a former consul in a Rangoon prison. The Danish government is under domestic pressure to demand action from the European Union against Burma, including a trade boycott.

Mr James Leonard Nichols, 65, consul in Rangoon for Denmark, Norway, Finland and Switzerland until his arrest in April, died at the weekend. In May he was jailed for three years for unauthorised possession of two fax machines and nine telephones. But it is widely thought the real reason was his friendship with opposition leader Ms Aung San Sun Kyi. Diplomats from Denmark, Norway, Switzerland and Finland are going to Burma to press for a full account of his death.

Mr Niels Helveg Petersen, Danish foreign minister, said yesterday he had initiated discussions with other EU governments about the case. *Hilary Barnes, Copenhagen*

## Republic move in Australia

A private member's bill to turn Australia into a republic and cut its ties to the British monarchy was introduced into the federal parliament by a Liberal party senator yesterday. The bill would make minimal changes to the existing constitutional set-up, except that references to the Queen and the governor-general, her appointee, would be removed. The present governor-general would become Australia's new president until a two-thirds majority in federal parliament picked a successor. The bill is likely to lapse when its sponsor, Senator Baden Teague, retires on Sunday. *Nikki Tait, Sydney*

# PM likely to call election before new rate hits voters' pockets

## Japan approves sales tax increase

By William Dawkins in Tokyo

The Japanese cabinet yesterday approved a long expected yet unpopular increase in sales tax, the first step in an attempt to rebalance the tax system and restrain a sharp rise in government debt.

Prime Minister Ryutaro Hashimoto asked his electorate "not to misunderstand" the tax rise, approved shortly before his departure for the Group of Seven economic summit in Lyons. The increase, from the present 3 per cent to 5 per cent, will be included in next year's budget, to take effect from April 1, 1997.

This will raise an estimated ¥4,000bn-¥5,000bn (\$36.7bn-\$45.9bn) a year for the finance ministry's coffers, and make a measurable dent in the central government budget deficit, set at ¥21,000bn this year, or 4.5 per cent of gross domestic product.

At the same time, the tax increase will be a drag on economic growth. Estimates of the negative impact range from 0.5 percentage points at EZW in Tokyo, to 1.1 points at Mitsubishi Research Institute, which yesterday forecast that GDP growth would reach 2.1 per cent in the current year to next March - the lower end of market predictions - and ease to 1.4 per cent the following year.

Now that the government has confirmed the tax increase, political observers in Tokyo expect Mr Hashimoto to call a



Premier Hashimoto (right) with finance minister Wataru Kubo

general election at the end of this year or early next year, before the new tax rate hits voters' pockets and his popularity rating in the polls.

This has ebbed a little recently, but the Liberal Democratic party still commands enough of a lead to win an election, either alone or as the dominant partner in another coalition.

An opinion survey yesterday by the Nihon Keizai Shimbun economic daily showed support for Mr Hashimoto's cabinet

had fallen nearly 7 percentage points to 41.5 per cent over the past two months. The main opposition party is trailing with less than 10 per cent, according to other polls.

The decline in Mr Hashimoto's popularity is a reminder that sales tax, while low by European standards, arouses much sensitivity.

A former LDP government introduced the tax in 1989, under strong pressure from the finance ministry, and in consequence lost an upper house

Japan's economic outlook brightened slightly in April, according to the latest official data released yesterday, reports William Dawkins from Tokyo.

The government Economic Planning Agency's leading diffusion index, a basket of 11 indicators pointing to conditions in the next six months, rose to 85.8 in April, from 85.4 in March.

It was the first time in two months that the index stood above 80, which represents equilibrium between growth and recession. Before then, the index had stood at above 50 for six months in a row, a harbinger of the recovery which emerged at the end of last year.

Yesterday's figure suggests slower growth than indicated by the 12.7 per cent annualised increase in gross domestic product reported in the three

months to March, the fastest in 23 years.

This supports most economists' belief that the pace of economic recovery, while strong, will ease in the second quarter of this year. Mr Shusei Tanaka, EPA director-general, yesterday predicted the recovery would become "self-sustaining" in the current fiscal year.

In another sign of gentle recovery, the Japan department stores association yesterday announced sales by its 109 member companies increased 1.7 per cent in May, the fifth month of increase, and unchanged from the growth rate in April.

While a good sign, this is inconclusive evidence of a revival in consumer spending. The general measure of retail sales showed a 1.1 per cent decline in April.

The tax increase is less than the finance ministry had wanted, but a step in its campaign to correct Japan's uniquely unbalanced tax structure. At present, the state derives around two-thirds of tax revenue from direct taxation and the rest from sales tax. The balance in other leading mature economies is the opposite.

election the same year, the start of the erosion of the LDP's post-war monopoly on power.

Members of the three-party ruling coalition were yesterday debating ways to soften the impact of the tax rise. The LDP is considering extending for another year a temporary ¥2,000bn income tax rebate.

Its centre-left coalition partners, the Social Democratic party and New Harbinger party, are urging a variety of measures, including a lower

sales tax for food and drink and increased welfare payments for the poor and elderly.

Over the past few months, existing operators have been engaged in a price war, reducing charges more than 50 per cent. Analysts say the market is still attractive, citing its strong expansion.

At the end of April, the number of mobile telecom subscribers totalled 898,626, a sharp increase over the 798,373 at the end of March and a beginning-of-year figure of 697,600. With a penetration rate of more than 15 per cent, Hong Kong is one of the world's most developed mobile telecom markets.

# China ends HK mobile phone licence deadlock

By John Ridding and Louise Lucas in Hong Kong

China has given its backing to the award of six new mobile telecom licences in Hong Kong, clearing the way for a resolution of a protracted stand-off with Britain and the territory's government.

The two sides have been deadlocked for almost a year over the issue, seen as a test case of Hong Kong's business autonomy. China had blocked an earlier award of the licences, claiming fewer franchises should be awarded,

apparently after pressure from telecoms groups in Hong Kong. The list of licence winners is expected to include People's Telephone, a consortium led by China Resources, the mainland investment and industrial group; Hutchison Telephone, part of Mr Li Ka-shing's business empire; and the P-Plus group which includes Taiwanese investors.

Hongkong Telecom, the territory's dominant operator and a subsidiary of Cable and Wireless of the UK, appears to have been rejected. An agreement is expected to

be finalised by early next month, though officials indicated potential sticking points remained. These include China's request for a mid-term review of the 10-year licences.

Observers described the condition as a face-saving formula. "I doubt the new government would cancel or alter any licences," one analyst said, referring to the post-colonial administration to take office after next year's transfer of sovereignty to China. Under the treaties governing the handover, Hong Kong is to have autonomy in managing

its economic system. A senior executive of one Hong Kong telecoms company expressed concern. "Businessmen abhor uncertainty. There is enough uncertainty in the markets, especially highly competitive ones." Others warned of possible difficulties in securing finance and attracting customers because the condition placed a question over the duration of the licences.

The new personal communications services licences will increase the range of wavelengths available for mobile telecoms.

# Canberra refuses to give way on loans

By Nikki Tait in Sydney

Mr Alexander Downer, Australia's foreign minister, said yesterday that the new conservative federal government would not reconsider its plan to abolish the Development Import Finance Facility (DIFF) scheme, a "soft loan" scheme for projects mainly in the Asian region.

Abolition of the scheme - which costs around A\$120m (US\$96m) a year and provides aid worth about 35 per cent of a contract price - was first outlined in the coalition's pre-election material and attracted relatively little attention at that stage.

However, since the government took office in March, there has been storm of controversy over the scheme's withdrawal. Business lobby groups have argued that loss of the facility would reflect badly on Australia's standing in the Asian region, and that projects already in the pipeline would have to be abandoned.

The issue has also become a personal bugbear for Mr Downer, who told federal parliament last week that the subject had never been raised at ministerial level - thus implying that it was not a major issue in regional relationships.

However, he has since conceded that the matter was discussed with two senior ministers in the Indonesian government in Jakarta two months ago, and that concerns had been expressed in correspondence with the Chinese government - a discrepancy which has led to two unsuccessful censure motions against the foreign minister.

Last night, it was confirmed that concerns were also raised more formally in a letter from Mr B.J. Habibie, Indonesia's influential minister of research and technology. This correspondence had not previously been disclosed to parliament.

However, the foreign minister has refused to budge on the main issue. Mr Downer insisted the government "will not be reviewing the decision" to abolish DIFF.

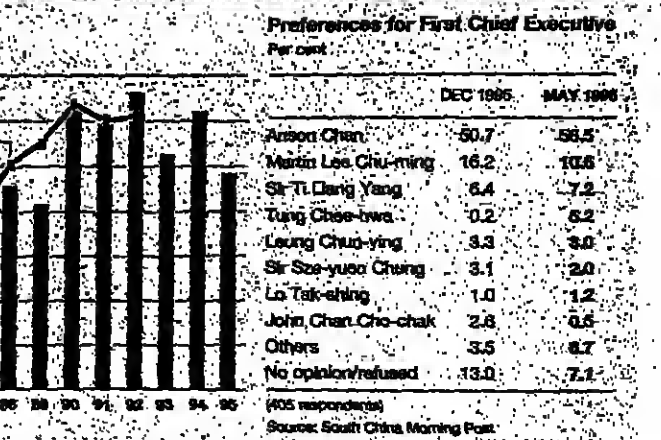
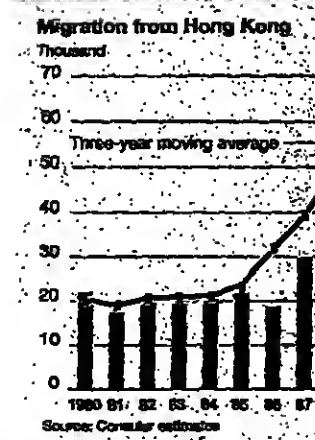
# Many rocks still litter HK's road to a smooth handover

As the giant digital clock in Beijing's Tiananmen Square moves toward the final year of its countdown to Hong Kong's return to China, many obstacles still remain to a smooth transition. While it may be unsurprising that many tough issues have been left until last, the run-up to the handover on July 1 next year could be difficult.

The most important decisions concern the chief executive, who will head the post-colonial government, and China's plans to replace the existing elected legislature. But also outstanding are legal issues of acute concern to the business community and significant, if symbolic, decisions relating to the handover ceremonies.

Manoeuvring to secure the position of chief executive has begun in earnest. Mr Tung Chee-hwa, the mercurial shipping magnate, this month signalled his interest in the prize when he announced his resignation from the territory's Executive Council. Mr Tung is a strong contender, considered more likely than Mrs Anson Chan, the popular Chief Secretary whose ties to the present administration weaken her chances of the top job. Mr Lo Tak-shing, a solicitor seen as a hardline option, has also launched his campaign.

Despite the flurry of activity, the decision is running behind schedule. The 400-member selection committee which will choose the chief executive has yet to be formed, pushing the original autumn timetable for the appointment to the end of the year. "We have to step up the pace," says Mr Tsang Yok-sing, leader of the pro-Beijing



Democratic Alliance for the Betterment of Hong Kong. While delay reduces the length of any destabilising period of twin executives, it prolongs uncertainty, it raises fears of divisions and indecision in Beijing about its favoured candidate and a worry that timing may affect the decision.

"If time is running out, the temptation would be to play safe," says Mr Michael de Golyer, head of the transition project at Baptist University. "For Beijing, that means

tial for breakdown in the transition process." On other issues, there is greater cause for optimism, partly reflecting improved Sino-British ties. After months of wrangling, Britain and China seem to be narrowing differences on the handover ceremony, a symbolic event but a telling indicator of how Beijing sees the achievements and institutions it inherits.

The statement by China's Premier Li Peng that no objection exists to a "glorious withdrawal" by Britain has yet to

translate into breakthrough at working level. But the omens are improving. Mr Hugh Davies, Britain's senior representative to the Sino-British Joint Liaison Group, says he sees the Chinese wanting a way out of deadlock.

Of more concrete concern to many in Hong Kong, particularly in business, are technical questions yet to be resolved, notably in the legal sphere. The change of sovereignty means international conventions, such as the 1958 New York convention on enforcing arbitration awards, will no longer cover legal cases between Hong Kong and China.

There is no existing arrangement for recognising and enforcing in Hong Kong judgments delivered in China, or vice-versa," says Mr Daniel Fung QC, Hong Kong's Solicitor-General. "The situation is now critical: the issue needs to be resolved urgently." Mr Fung cites a rise in corporate contracts, naming third countries as arbitration centres, and warns of the consequent threat to Hong Kong's position as a legal services centre.

Such issues are of real importance to business, otherwise relatively confident about the handover. "There are thousands of documents to be amended or translated and many agreements to be replaced," one solicitor said. "That is critical to a system based on the rule of law."

A broader issue relates to the formation of Hong Kong's court of final appeal, which will replace the Privy Council in July 1997. "The administration says nothing can be done about the all-important recruitment of judges until there is a chief executive-designate," says Ms Margaret Ng, an independent legislator. Whether this and the other issues can be resolved is a question which leaves observers divided. Mrs Chan appears largely optimistic. "It is unrealistic to expect you can devise a detailed map that will cover every single twist and turn ahead. But there is a willingness to step up co-operation."

# A lot of vital issues have been put aside until the very last moment, John Ridding writes

ensuring control." He sees this damaging Hong Kong's confidence and fuelling emigration.

Delay might seem more appealing on the issue of Beijing's plan to replace the territory's elected legislature, the main cause of dispute between China, Britain and the Hong Kong government. A Chinese official said this week he hoped to keep a majority of LegCo members on the new body; others stress the replacement legislature will not play a prominent role ahead of handover. This stance has shelved rather than solved the problem. The LegCo issue will continue to threaten the improved relationship between Beijing and London and cloud confidence. "This is something of a time-bomb," one western diplomat said. "Unless this can be resolved, there is always poten-

translate into breakthrough at working level. But the omens are improving. Mr Hugh Davies, Britain's senior representative to the Sino-British Joint Liaison Group, says he sees the Chinese wanting a way out of deadlock.

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<p><b>BOHLER UDDEHOLM</b> Böhler-Uddeholm AG Initial Public Offering ATN 1,000,000,000 B-141: Investmentbank Austria AG Lead Manager April 1995</p>	<p><b>Telefónica de España, S.A.</b> Secondary Offering PTN 10,270,000,000 nominal value B-141: Investmentbank Austria AG Lead Manager October 1995</p>	<p><b>MIL Magyar Haj-es Gázipari Rt.</b> Initial Public Offering HUF 20,100,000,000 B-141: Investmentbank Austria AG Co Manager November 1995</p>
<p><b>Ipoco Parking AG</b> Initial Public Offering ATN 20,000,000 B-141: Investmentbank Austria AG Co Manager June 1995</p>	<p><b>AURICON</b> Auricon Betriebsgeräte AG HUF 100,000,000 nominal value B-141: Investmentbank Austria AG Lead Manager October 1995</p>	<p><b>NETTINGSHORPER</b> Nettingshorper Betriebsgeräte AG Capital Increase ATN 110,000,000 nominal value B-141: Investmentbank Austria AG Lead Manager September 1995</p>
<p><b>adidas</b> adidas AG Initial Public Offering ATN 1,100,000,000 B-141: Investmentbank Austria AG Co Manager November 1995</p>	<p><b>RADER-HERKALUTH</b> Rader-Herkaluth Industrietechnik AG Capital Increase due to Merger of Vetech Rader AG and Herkaluth Holding AG ATN 145,120,000 nominal value B-141: Investmentbank Austria AG Lead Manager December 1995</p>	<p><b>Wolfford AG</b> Initial Public Offering ATN 470,000,000 B-141: Investmentbank Austria AG Lead Manager February 1995</p>
<p><b>7+ Telecom bond 1995-2001 for PTT Austria</b> ATN 2,000,000,000 B-141: Investmentbank Austria AG Lead Manager March &amp; June 1995</p>	<p><b>Land Kärnten</b> Land Kärnten Multiple Coupon Bonds 1995-2007/99 ATN 300,000,000 B-141: Investmentbank Austria AG Lead Manager September 1995</p>	<p><b>Kärntner Wasserwerke</b> Kärntner Wasserwerke AG ATN 100,000,000 B-141: Investmentbank Austria AG Lead Manager September 1995</p>
<p><b>SAFE</b> Sachanlage AG für Energieerzeugung 6.10 % Bond 1995-2009/99 ATN 300,000,000 B-141: Investmentbank Austria AG Lead Manager October 1995</p>	<p><b>Bank Austria GiroCredit</b> Bank Austria GiroCredit AG Capital Increase, Initial Public Offering, Private Placement HUF 1,000,000,000 Bank Austria GiroCredit Investment Ltd. Lead Manager May, June &amp; July 1995</p>	<p><b>Bank Austria GiroCredit</b> Bank Austria GiroCredit AG Private Placement HUF 1,000,000,000 Bank Austria GiroCredit Investment Ltd. Lead Manager November 1995</p>

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INSURANCE & INVESTMENT



NEWS: WORLD TRADE

US hurdle for BA-American deal

By Michael Stappinger, Aerospace Correspondent

As negotiators from the UK and the US met in Paris on Monday for preliminary discussions on a new "open skies" agreement...

too dominant on the transatlantic routes. They have received support from airlines in other countries...

when it formed an alliance with BA in 1993 - although this argument is slightly weakened by the fact that the USAir routes were taken over by BA...

Bolivia to sign free trade pact with Mercosur

By David Pilling in Buenos Aires

Bolivia is to join Chile in signing a free trade deal with the four-nation Mercosur customs union.



Gonzalo Sanchez de Lozada, Bolivia's foreign minister, is helping Bolivia export goods not drugs

President Gonzalo Sanchez de Lozada said yesterday the most difficult parts of the accord had been agreed...

imported \$500m worth of goods from Brazil but legally exported only \$20m to that country...

IBM to create 1,000 jobs in Ireland

By John Murray Brown in Dublin and James Buxton in Edinburgh

International Business Machines is to create 1,000 jobs by building a new customer support centre in Ireland and expanding its call centre in Scotland.

Boeing forecasts strong growth in Asia

By Tony Walker in Beijing

Boeing, the US aircraft manufacturer, yesterday said it expected business in Asia to grow strongly in the next 10 years...

China has had a \$1bn-\$2bn order pending for 20 new Boeing aircraft since last year...

of the proposed venture is to produce up to 1,000 100-seat aircraft.

NOTICE OF MEETING WITH CHAPTER 7 TRUSTEE. SOUTHEAST BANKING CORPORATION. Floating Rate Subordinated Notes Due 1996...

WORLD TRADE NEWS DIGEST. Banks pioneer Shanghai deal. Kantor plea on S Korea tariffs. EU applies to lend to Vietnam.

Albania takes direct line to European integration. Kevin Done on a growing mobile phone network. System will be out of reach of all but a small minority. BB MEDTECH. MEDICAL TECHNOLOGY: A GROWTH INDUSTRY.



# Labour leader deplores 'isolationism'

By John Kampner, Chief Political Correspondent

The opposition Labour party yesterday set out a strategy to raise Britain's international profile by using its unique membership of the Commonwealth, the European Union and the United Nations Security Council.

Mr Blair deplored the "isolationism" of the Conservative government, which he said had led to a decline in Britain's international standing.

Mr Blair said Labour would work from within the EU to promote free trade and to take a "far more vigorous approach" to opening up the single market.

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# Industry minister backs free trade

By Robert Peardon, Political Editor

The promotion of competition and free trade are once again the core aims of the Department of Trade and Industry, Mr Ian Lang, its chief minister, says today.

In a speech at the centenary dinner of the Engineering Employers' Federation, Mr Lang will also indicate the possibility of a government paper later in the year to demonstrate the government's claim to be the "global champion" of bringing down trade barriers.

"We shall be looking to set out in more detail in the autumn our policies for pursuing global free trade and the contribution both trade and foreign policy make to Britain's economic standing in the world," Mr Lang will say.

It is understood that DTI and Foreign Office officials are preparing a series of proposals on liberalising international trade. The paper which is likely to result will establish the government's agenda for the first meeting of the World Trade Organisation, scheduled to take place in Singapore at the end of the year, and set out proposals for the long term.

Mr Lang's speech is intended to summarise his philosophy as trade and industry secretary on his first anniversary in the job. In stressing the importance of competition he is widely seen as striking a very different tone from that of his predecessor, Mr Michael Heseltine, now deputy prime minister.

Mr Lang's view, mergers "can... present a threat to a vigorous competitive market". However, he feels that the existing institutional arrangements for regulating and vetting proposed takeovers "work well".

Mr Lang will say his recent decisions to block mergers in the electricity industry demonstrate that he places "great weight on promoting competition". He will pledge that so long as he remains in the DTI post, he will "continue to keep the interests of competition foremost in my mind".

Mr Lang's overall objective for trade and industry policy is to "set enterprise free" with "three clear goals... free enterprise; free trade; competition as the driving force". He will also say government should adopt a less visible role in industrial initiatives. It should set a framework, but specific projects, such as the existing Business Links network of advice centres, will increasingly be managed and funded by the private sector.

# UK NEWS DIGEST

## Security of top landmarks to be privatised

A private sector security company could soon be protecting many of London's most sensitive landmarks - including the Home Office, the Treasury, St James's Palace and the Tower of London - under plans unveiled by the government last night.

The Cabinet Office later indicated that the only buildings certain to retain protection by government security staff would be the Ministry of Defence and the M5 and M6 security services.

The opposition Labour party and trade unions instantly condemned the announcement. Mr Jack Dromey, national secretary of the TGWU public service union, said the privatisation plans were "absurd".

Law change heralds divorce rush

Worried husbands are rushing to start divorce proceedings against their wives in an attempt to beat the introduction next week of tougher regulations on the treatment of pensions on divorce.

The most likely losers from the new rules will be husbands who have built up large pension funds and who are divorcing wives with little or no pension arrangements.

Mr Lang's speech is intended to summarise his philosophy as trade and industry secretary on his first anniversary in the job. In stressing the importance of competition he is widely seen as striking a very different tone from that of his predecessor.

Mr Lang's overall objective for trade and industry policy is to "set enterprise free" with "three clear goals... free enterprise; free trade; competition as the driving force".

## Minimum wage plans strengthen

The opposition Labour party is likely to put its plans for a minimum wage at the centre of its legislative programme for its first year in office.

Part of the change of heart has followed signals from Labour that companies who give teenage employees a day of training a week would be exempt from a minimum wage. It is believed that such a concession would be a necessary trade-off to encourage employers to take part in training schemes for the under-25s.

## British Gas egm proposed

Leading institutional shareholders are considering calling an extraordinary general meeting at British Gas as a protest against the pipeline charges being proposed by Ofgas, the industry regulator.

Investors are furious at the tough pricing formula put forward by Ms Clare Spottiswoode, the gas industry regulator, for Transco, the British Gas pipeline division.

## Environmental concerns backed

The House of Commons' environment committee yesterday urged the British government to support the European Commission's controversial proposals to amend free trade rules to prevent them from undermining global environmental accords.

The Commission wants WTO ministers meeting in Singapore in December to specify conditions under which environmentally inspired trade restrictions could be exempt from international free trade rules.

## Correction: Mr Ron Baker

We reported yesterday that Mr Ron Baker, formerly head of the financial products group at Barings, has been banned by the Securities and Futures Authority from working in the City of London for three years, and is appealing against that ban.

# Opposition MPs urge cut in farm minister's pay

By James Harding at Westminster

Ministers yesterday rallied to support Mr Douglas Hogg, the agriculture minister, as the House of Commons debated his handling of the beef crisis and a proposal to cut his salary by £1,000 (£1,850).

Mr Tony Baldry, a junior agriculture minister, gave details of how the bulk of the European ban on British beef could be lifted by the end of November as part of his defence of Mr Hogg.

The attack on the embattled agriculture minister took the form of a motion by the Liberal Democrat party to cut his salary - a sore point for the government after pressure on the

prime minister from his cabinet colleagues to sack Mr Hogg emerged over the weekend.

Mr Paul Tyler, Liberal Democrat agriculture spokesman, justified the call for a cut in Mr Hogg's pay so that "the long-suffering beef and dairy industry should at least have the satisfaction of knowing that somebody is being held accountable for their undeserved suffering".

Mr Baldry replied to what he called Mr Tyler's "self-seeking, sanctimonious and tawdry little speech" with a paean to his superior minister, who was attending a meeting of European Union agriculture ministers in Luxembourg.

has worked flat out for three months to try and resolve this crisis," Mr Baldry said.

As part of the government's strategy to eradicate BSE from the national herd, all cattle born in Britain or imported are to have a compulsory passport from next week.

A computerised system for recording the movement of cattle should be in place by November.

The government expected to clear the backlog of around 200,000 animals for slaughter by mid-October, he said.

# Dutch reject plea for rendering aid

By Gordon Cramb in Amsterdam

British options for disposing of the country's hundreds of thousands of condemned cattle rendered yesterday when the Dutch government said it would not permit the shipment of excesses to the Netherlands for rendering and incineration there.

The UK agriculture ministry, facing a large backlog in the slaughter programme aimed at eliminating the "mad cow" disease BSE, has been seeking ways to get round a shortage of domestic capacity for grinding down and destroying the remains.

No official approach has yet been made to the Dutch authorities. The Netherlands agriculture ministry is opposed to the idea.

which they were hoping would take on some of the work.

However, a law governing the destruction of animals gives the Dutch health ministry power to refuse permission for any such operation, whether or not the European Union ban on exports of British beef is adjusted to allow such a cargo to leave UK shores.

"As far as we can see we would not favour it," a health ministry official said in The Hague. "We are trying to get rid of the problem, not import it."

No official approach has yet been made to the Dutch authorities. The Netherlands agriculture ministry is opposed to the idea.

# Engineering lifts manufacturing gloom

By Peter Marsh in London

Mulling over the latest manufacturing statistics, Mr David Shall shakes his head with disbelief. The chief of the UK division of Sandvik, the Swedish engineering company, does not recognise the official picture of a slowdown in manufacturing pushing the sector into recession.

Sales of Sandvik products, mainly specialist tooling and engineering systems, reached £180m (£208.17m) last year, up 29 per cent on 1994. Mr Shall is forecasting further growth to about £200m next year.

"Most of the businesses we are selling are very optimistic, even if the rate of growth may have slowed down a bit from last year," said Mr Shall. Sandvik is in the middle of a three-year investment programme, taking it to the end of 1997, totalling nearly £40m.

Mr Shall's views reflect the perspective of many UK-based engineering companies - which appear to be doing better than manufacturing as a whole. The picture is expected to be confirmed by this week's



Specialist tool operations at Sandvik's Coventry plant are boosting the Swedish company's growth

business trends survey by the Engineering Employers' Federation. Growth for the sector this year is expected to be about 2 per cent. But an EEF official warns that the picture is patchy.

Professor Brian Fynes, a manufacturing expert at University College, Dublin, believes engineering companies may be doing better than counterparts in manufacturing generally because they are

more likely to be focused on specific "niches".

Also, many engineering companies are likely to be linked closely to customer businesses in other branches of manufacturing, through contracts involving a sharing of design practices and commitment to higher quality products.

As a result, according to Prof Fynes, engineering companies are in a better position than manufacturers of general com-

modity products to respond to customers in areas such as reducing defects.

Many engineering businesses have also introduced "teamworking" and "continuous improvement" production techniques which have lifted productivity and improved response times.

Changes in labour practices, accounting job flexibility, often mean a company can respond quickly to the customers'

demands, according to Mr Martyn Vaughan, the director of a tractor plant in Basildon, Essex, run by New Holland, a subsidiary of Fiat of Italy.

Last year the plant, one of Europe's biggest tractor factories - employing 1,500 people - made 29,000 machines. The projection for next year is 34,500.

The plant makes its machines in hundreds of variations, depending on customer preferences. Worker flexibility is a key to its success, according to Mr Vaughan.

Total annual sales of UK-based engineering companies are about £160bn - of which nearly half are exported. The sector accounts for about 40 per cent of UK manufacturing output.

Another UK engineering company that believes it has benefited from a "niche" approach is Molins, one of three companies worldwide which make cigarette production equipment.

With UK sales accounting for just 8 per cent of its £285m revenues last year, Mr Peter Harrison, Molins' chief executive, sees good growth prospects, especially from emerging markets such as China.

# Nike's knack is to pick losers for its advertising

By George Parker in London

It is being called "the curse of Nike". The US sportswear company's unfortunate choice of top stars to promote its products is fast becoming a standing joke after a string of disasters spanning the Olympics, the Wimbledon tennis championships and the Euro 96 soccer tournament.

Nike seems unable to pick winners. In fact, the £1m (£1.53m) poster campaign timed to coincide with Euro 96 typifies the company's unerring ability to identify losers and complete non-starters.

The company singled out five footballers to spearhead its Euro 96 advertising blitz, and none has been conspicuous by his success in the tournament.

In fact three have not been conspicuous at all - Eric Cantona and David Ginola did not make it into the French national squad, while Les Ferdinand did not make the cut for England.

Paulo Maldini, the Italian defender, was on a flight home after Italy lost in the qualifying round of the tournament.

The fifth player to suffer the Nike jinx - the Dutch striker Patrick Kluyvert - had an even worse time. After attracting fierce criticism for committing a serious drink-driving offence in the Netherlands, he made only fleeting appearances before his team were eliminated in the quarter-finals.

"We don't see it as a mistake," said Mr Peter Bracegirdle, account director at the advertising company, Simons Palmer. "Nike is a company which likes to take a point of

view - the world of sport is unpredictable."

If Nike is embarrassed, it is not showing it. Yesterday the company launched a tongue-in-cheek newspaper campaign in advance of today's semi-final between England and Germany, acknowledging the "curse".

Reprinting the earlier Kluyvert and Maldini adverts, the script underneath reads: "Nike would like to wish Germany good luck. (That should do it.)"

No sooner had Nike displayed its nous in the world of soccer, than the company embarked on a campaign to coincide with the start of the Wimbledon tennis championships.

With typical bad luck, the company launched a series of television adverts featuring the American tennis star Andre Agassi on Monday night - only hours after Agassi was knocked out by a rank outsider in the first round.

Nike's curse extends back at least as far as the Barcelona Olympics in 1992, when the company put all its resources into pushing the likes of the sprinter Michael Johnson.

"Michael didn't run quite as fast as we might have liked in the 400 metres," admits Mr Bracegirdle. "He went down with a bout of food poisoning - I think it was the peaches."

But once again the company turned its disastrous judgment into a joke. "If you're going to put your foot in it, put your foot in it with a pair of Nikes," ran the advertising message.

# Soccer success gives workers a kick

By Peter Marsh in London

Factories in England can expect a boost to production and quality tomorrow if the nation's soccer players win against Germany in tonight's Euro 96 semi-final.

The 14-strong panel, one for each England team member and the obligatory three substitutes, was chosen from a range of industries. By a narrow 8-6 scoreline, the production experts said manufacturing performance had been

enhanced in England in the past two weeks since the football side began its unexpected advance to the semi-final of the Euro 96 competition.

"There has been a definite feelgood factor in manufacturing," said Mr Terry Smith, who runs a lighting plant with a workforce of 1,000 owned by the TLG Lighting group.

"The [England] performance has given people a lift, and a happy workforce is a better workforce," said Mr Jeff Forrest, engineering director of Temporal Springs, which supplies the automotive industry.

More sceptical is Mr Don Lorraine, managing director of KAB Seating, which makes tractor seats. He is having to go to the trouble of installing TV sets at his plant tonight so workers on the evening shift can follow the match. Mr Lor-

raine thinks "there is no discernible evidence" that a good result will affect production.

Mr Paul Henzi, works director of Heusal Engineering, an engineering subcontractor, says the overall effect on commercial performance is probably negative because of people "talking about football more and doing less work".

The Euro 96 competition has led to shows of one-upmanship at some plants run by non-UK

MPs yesterday attacked the "jingo journalism" and "anti-German nonsense" in some British newspapers in the run-up to tonight's Euro 96 soccer semi-final between England and Germany at the Wembley stadium.

Now the MPs have tabled a House of Commons motion deploring the "nonsense" in the press. They contrast "the boisterous atmosphere" of press comment recently with the sporting enthusiasm of the fans who have "set a much better example of English fair play".

companies, for instance at the headlamp factory run by Magneti Marelli of Italy - whose national side was knocked out in the Euro 96 qualifying rounds.

"We saw a bit of Mickey-taking [at the expense of Italian colleagues]," said Mr Fred Annis, plant manager at the 800-strong factory. He thinks the "jubilation" of his workforce at England's successes will have a positive impact on production.

# Mobile phone coup boosts 'Cambridge phenomenon'

By Alan Cane in London

The Technology Partnership, which this week announced worldwide acceptance for its proprietary mobile phone technology, is one of a group of innovative companies in eastern England collectively responsible for the "Cambridge phenomenon".

Its contribution to the remarkable growth of high technology entrepreneurship in the East Anglia region began in 1988, when 24 engineers and managers led by Dr Gerald Avison agreed to form a contract research partnership. Many of them had previously worked for PA Technology, one of the first "Cambridge phenomenon" companies and a hotbed of wireless expertise. Overall, the phenomenon represents a period stretching back three decades in which a surprising concentration of high-tech companies have been spawned in the Cambridge area.

Today, the Technology Partnership is 300-strong and growing rapidly.

Revenue last year was £25m (£36.25m) and it expects to turn over between £30m and £35m this year. Its shareholders are CINVEN (13 per cent), 3i (9 per cent), Vision Systems (8 per cent) and its employees (70 per cent). The company's latest design breakthrough is expected to pave the way for smaller, cheaper and more powerful mobile phones.

The Technology Partnership still derives much of its funding from project work. It took an early decision to invest its earnings in a small number of areas where it believed it had special skills and where it would eventually license its technology. It now ploughs back between 15 per cent and 20 per cent of turnover into developing technologies.

Wireless technology is one of these areas and automated manufacture of pharmaceuticals another. It is becoming recognised for Wavedriver - a joint venture with PowerGen, the electricity generator - which will lead to electrically powered buses guided

by signals from geostationary satellites.

The group's involvement in mobile radio began in 1989 through the development of analogue cellular phones for Ericsson of Sweden, now the world leader in cellular systems.

It continued with a multimillion pound wireless project in the Pacific Rim in conjunction with British Aerospace. This experience later helped secure the licence leading to the launch of Orange Communications, the UK cellular operator in which BAe has a minority stake.

The group's involvement in GSM, the European digital mobile standard, goes back to 1990 but the key event was the establishment in 1993 of a long-term collaborative agreement with Analog Devices of Boston, a leading US semiconductor designer and manufacturer. The two companies work together on the design of silicon chips for mobile handsets. The chips are manufactured by the US company.

Dr Tony Milbourn, computers and communications division manager, explained that the association with Analog Devices, a world-class company, gives the Partnership a recognition that a small Cambridge company would find hard to achieve on its own.

It had been instrumental in opening the door to a number of customers, including large multinational companies in the Asia Pacific region.

Official approval of the Partnership's GSM technology means it is acknowledged as world class in competition with groups such as Nokia of Finland, Motorola of the US and Philips of The Netherlands. How does a small company achieve such a result? Dr Milbourn says: "By doing nothing else. By putting all our eggs in one basket and focusing single-mindedly on GSM technology." As a result, the group is able to offer for licence all the components for GSM cellular handsets: the chips and the software, as well as technical consulting, training and support.



Tony Milbourn: "Association with US company aided global recognition"



BUSINESS AND THE ENVIRONMENT

A European joint initiative to cut vehicle pollution has split over fears about costs, writes Lucy Plaskett

# Airing the differences

It was hailed by Brussels as a new, non-confrontational way to frame environmental legislation - the European Commission, vehicle manufacturers and the oil industry would work together to tackle road transport's contribution to air pollution.

An unprecedented three-year collaboration known as the "Auto Oil" programme led to the commission's adoption last week of proposed legislation for cleaner fuels and tighter curbs on vehicle emissions.

But there was disagreement even before the ink was dry on the proposals - presented yesterday in Luxembourg to EU environment ministers by Ritt Bjerregaard, environment commissioner. During the past months, relations between the three sides have deteriorated as it became clear that the car industry would have to foot most of the bill.

The commission instigated the Auto Oil programme in 1993, when it became clear that future air quality targets being considered by the World Health Organisation would require drastic cuts in emissions.

Road transport is a leading source of pollutants such as carbon monoxide (CO), nitrogen oxide (NOx), benzene and ozone, which contribute to smog in cities and have an adverse effect on health.

The idea was for the commission and the two industries to work together on the most cost-effective approach for tackling this pollution. The commission would then devise standards for 2000, to meet the new air quality targets by 2010.

By working together in this way, EU officials hoped to avoid the political infighting and furious industry lobbying that occurred when new fuel and vehicle specifications were introduced in the US under the 1990 Clean Air Act.

The car and oil industries, delighted at the chance to influence Jacques Calvet is not amused. Nor are the heads of Europe's other leading vehicle producers which, along with Calvet's Peugeot Group, make up the European Automobile Manufacturers Association.

As the association's president, Calvet points out that vehicle makers have borne since 1970 a large financial burden in cutting emissions of carbon monoxide, hydrocarbons and oxides of nitrogen from car exhausts by 90 per cent. In the same period, truck diesel emissions of NOx have fallen by 65 per cent and of sooty particulates by 85 per cent.

Yet now the car industry must spend Ecu4.1bn a year for the next 15 years cutting current exhaust emissions by a further 20 to 40 per cent from 2000, with additional costs for the second step to apply from 2005.

On Europe's average annual

future legislation, invested Ecu10m (28m) in a joint research project, the European Programme on Emissions, Fuels and Engine Technologies (EPFETE).

At the same time, commission officials assessed the scale of the pollution problem by studying the air quality of seven European cities - Athens, Cologne, The Hague, London, Lyons, Madrid and Milan.

This research threw up two important results: first, that while existing legislation would bring levels of CO and benzene below the target limits by 2010, the real problem was how to deal with NOx, particulates - sooty particles largely caused by diesel exhausts - and ozone.

Second, the studies appeared to show it was possible to have a greater impact on emissions by varying vehicle technology than by improving fuel.

The recently-adopted legislation reflects these results. But devising it prompted conflict within the commission: the environment directorate advocated stricter standards, while the energy and industry directorates opposed them because

of concerns about the effect on oil refiners and carmakers.

The package consists initially of two measures - a proposal to cut emissions from cars, and another to improve the quality of petrol and diesel fuels. Further initiatives to limit emissions from vans and heavy-duty vehicles will follow next year, along with tougher inspection and maintenance tests.

The commission estimates the total cost of the package will be Ecu5.5bn a year for the next 15 years, with an annual Ecu4.1bn falling on vehicle manufacturers.

Exhaust emissions of CO, hydrocarbons, NOx and particulates must be cut by 20 to 40 per cent from 2000. Complying with the legislation is set to cost car producers Ecu2.4bn a year, and van producers and heavy-duty vehicle manufacturers Ecu3.1bn and Ecu575m a year respectively.

Car and van producers will also share an annual cost of Ecu700m to fit on-board diagnostics - equipment that monitors the performance of catalytic converters. By contrast, the cost to the oil

New targets in drive to cut emissions

Pollutant	2000	2005
Carbon monoxide	2.30	1.00
Hydrocarbons	0.25	0.10
Nitrogen oxides	0.15	0.08
Carbon monoxide	0.64	0.50
Hydrocarbons	0.08	0.05
Nitrogen oxides	0.50	0.25

refining industry will be just sulphur in diesel and petrol to 350 parts per million (ppm) and 200ppm respectively.

As well as cutting other pollutants, refiners will also have to phase out leaded petrol by 2000, with a possible three-year extension for southern member states, such as Spain and Portugal.

The commission believes that the actual cost to the consumer of the whole package will be small, with the changes to the car putting between Ecu200 and Ecu300 on to the cost of each vehicle, and the fuel improvements adding, on average, a minimal Ecu1.7 to Ecu2.3 to a motorist's annual fuel bill.

But the cost to both industries will be significantly increased by a proposed second round of emission cuts to apply from 2005. Under this "second step", vehicle emissions will have to be reduced by 50 to 70 per cent from present levels. Fuels will also have to be

improved, with further cuts in sulphur, to enable new vehicle technologies to work effectively. While there are plans to consult industry again before bringing out these new standards by December 1996, the commission already estimates the second step will cost vehicle manufacturers a further Ecu2.7bn a year, and oil refiners an extra Ecu2.25bn.

After three years of collaboration, car producers argue they have been unfairly burdened with most of the clean-up costs, and ACEA, the European vehicle manufacturers' association, is calling for "balanced contributions" from both industries.

It says cleaner fuels would have an immediate impact on emissions, while changes to vehicle technology would take years to permeate the vehicle fleet.

But the oil industry, which supports the measures, counters that they are in line with the Auto Oil conclusions. "The car industry cannot deny that what the commission has proposed is in line with the

study," says Europa, the European oil industry association.

Both industries, however, are united in their opposition to tighter limits from 2005 without further rigorous cost-benefit analysis. Car producers believe fiscal incentives would distort the EU internal market, and increase costs by requiring manufacturers to make several versions of the same vehicle.

Meanwhile, the oil industry resists the idea that new vehicle technologies will need cleaner fuels. The proposals have also drawn fire from environmentalists, who say fuel and vehicle standards are too lax.

Both industries will now lobby the European parliament, where MEPs are able to demand changes to the new laws. But any hope of relaxing the regulations will be tempered by the knowledge that parliamentarians have tended to tighten, not ease, anti-pollution laws.

Lucy Plaskett is editor of the FT newsletter EC Energy Monthly.

Cutting exhaust emissions will prove expensive, reports John Griffiths

## Carmakers pay the price of progress

production rate of about 13m units, the industry argues, that works out at a cost of more than Ecu300 per car - to cut its emissions by only a further 3 to 5 per cent compared with the pre-catalyst era.

Vehicle makers have a clear self-interest in urging other measures that would rapidly improve air quality and would not cost the industry itself money - notably "cleaner" fuel and scrapping incentives to remove from the streets the millions of non-catalyst cars that produce most of Europe's exhaust pollution. None the less the manufacturers' conviction that more stress should have been placed on this aspect of

control is deeply felt. Yet, provided the EU's Council of Ministers puts its final stamp of approval on the commission's proposals, the industry will grumble loudly and carry on developing technologies that will allow compliance.

However, it will still attempt to have the rules rewritten to excise at least one proposal which it regards as an absurdity - for an on-board exhaust gases monitoring and display system showing on the dashboard that the car's exhaust gases are complying with the standards while in use. Such a system would be totally redundant because the function is implicit in the car's electronic engine and

catalytic converter management systems, the industry asserts.

There is at least a chance that such arguments might get listened to as the industry develops its various emissions-reducing technologies, for this year it has already won one important battle.

A few months ago the California Air Resources Board (CARB) rolled back a mandate which had required that 2 per cent of leading carmakers' sales in the state should be of zero-emissions - essentially battery-powered - vehicles from 1998, rising to 10 per cent by early next century. The technology is not adequately advanced, in terms of vehicle range, cost or performance

- and CARB accepted that the industry genuinely could not achieve the target.

Nor is the industry looking to any "breakthrough" technologies to get it off the legislative hook in Europe. It does not expect electric vehicles to form any significant part of Europe's car population until well into the next century, nor is the hydrogen fuel cell - recently demonstrated in a multipurpose vehicle by Mercedes-Benz - expected to make enough progress towards commercialisation to affect the commission's proposals for reducing petrol and diesel emissions.

Instead, the industry will now

## Saving for the earth

Hot air or sound business sense? That is one question investors might well ask when inquiring about a new type of bank account being offered to UK savers to help combat global warming.

The Earth Saver Account was launched last week by Dutch-based Triodos Bank, which aims to use proceeds raised primarily to finance renewable energy projects and energy conservation projects in the UK.

In a new departure, Friends of the Earth, the UK environmentalist pressure group, is helping to market the scheme by urging savers to switch their savings into the account. Friends of the Earth has invested not only its prestige but also 2200,000 (\$306,000) in the new financial instrument.

Renewable energy and energy conservation are seen as important tools for keeping in check greenhouse gases, emitted by the burning of fossil fuels, which are believed to contribute to climate change. Governments meet in Geneva next month and Japan next year to agree targets for reducing such emissions in the next century.

Triodos is promising to pay Earth Saver Account holders gross interest rates of up to 5 per cent per annum. Glen Saunders, managing director of the bank's UK office in Bristol, says the rate of return on its existing loans to renewable energy projects averages about 8 per cent.

To green investors concerned about choosing a safe investment, Saunders says depositors would be protected by the Netherlands' scheme to protect savers in the event of the bank failing. Triodos is allowed to operate in the UK under European Union legislation enabling banks to set up shops anywhere in the EU.

Since the plan was unveiled last week, Triodos has had a number of inquiries, and hopes public interest will increase even more after it publishes advertisements in two daily newspapers today.

Leyla Boulton

# HOW TO MAKE A MONEY BOX.

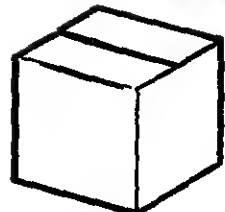


FIG 1.

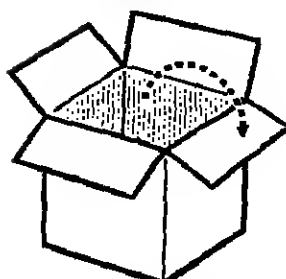


FIG 2.

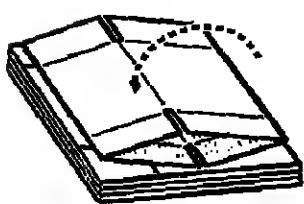


FIG 3.

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ARTS

Television/Christopher Dunkley

# Don't throw away the crown jewels

The decline and even expiry of public service broadcasting is being predicted once again. These set upon changing the BBC, perhaps beyond recognition (to the incredulity of foreign broadcasters who see the British tipping their crown jewels into the dustbin) argue that this is a necessity if the BBC is to survive the predicted competitive challenge of digital broadcasting. Programmes will become cheaper. We are told, thanks to this digital revolution. Presumably cars will become cheaper if only we build more roads. No one has yet explained how digital transmission will cut a penny off programme costs, nor how much will be saved under the new style McKinsey BBC.

But those, it seems, are petty details. What is supposed to be obvious is that the old era of broadcasting by huge public service bodies, transmitting from high masts, is coming to an end. Wavelength scarcity will be replaced by channel abundance, and, whatever the niggling details, the new technologies will enable competitors to take audiences from scientific bodies such as the BBC unless they reinvent themselves.

This all sounds pretty familiar, of course. Cable and satellite used to be the "new" technologies, and they were going to take away the old

broadcasters' audiences. Actually, after all their years in business, there is still not a single UK satellite or cable network which manages to get even a tenth of the audience attracted by ITV or BBC1. All of them put together (there are 48 available in north-west London) take only 10 per cent of the audience while the four terrestrial "dinosaurs" still hold 90 per cent. But if 48 can take 10 per cent, surely 480 will take 100 per cent? The arithmetic does not work quite like that. All that has been proved with the new technologies so far is that if you capture sports rights by pushing fees sky high and then charge vastly increased prices to the viewers, you can make a fortune.

But so what? Is it not inevitable that public service broadcasting off high masts will indeed come to an end one way or another, and when it does shall we really miss it? Evidence from the 48th Prix Italia broadcasting festival in Naples suggests that we shall. True, this is one of the great bastions of the public service ethos, with high

ideals such as "improvement in the quality of radio and television programmes" (note the order of the two media) "to foster co-operation between persons engaged in creative radio and television broadcasting, and to stimulate the study and discussion of the cultural and creative problems raised by these two forms of expression".

Those may sound like Reithian sentiments, yet it was not a BBC mandate which made an impression on Sunday night, praising the role it has played in raising programme standards, apologising for the slowness of the British in coming to its defence when the festival's survival seemed threatened a couple of years ago, and celebrating its new found strength today under secretary-general Paolo Battistuzzi - it was Sir George Russell, retiring chairman of the ITCA, the body which controls British commercial broadcasting.

Commercial broadcasters are not excluded from the Prix Italia, but if

you spend every day during the two weeks of this event in the observatory rooms and the on-demand cbls, looking through scores of programmes from all over the world in all three prize categories - drama, documentary, and arts - you cannot miss the fact that the most impressive and demanding work is, as so often, coming from public service organisations, or (as in the case of the UK) from commercial broadcasters forced to compete fiercely with public services.

The American documentaries provide a good example. There is nothing wrong with the entry from CBS, one of America's big three commercial networks. This is an item from the old and often excellent current affairs magazine, *60 Minutes*, which endeavours to explain the significance of La Scala, Riccardo Muti, and the new *Winkler* to - presumably - an audience which has never heard of any of them. Given that it lasts just 16 minutes it does a remarkable job, and if you regard populism as television's primary concern then this is an excellent piece of work.

But *Troublesome Creek: A Midwesterner from America's tiny Public Broadcasting Service* is surely better, even though it would be greatly improved by having half an hour cut out of its 88 minutes. This is a passionately felt and lyrically conveyed story of the troubles of the Jordans, an Iowa farming family, fighting desperately against America's farm crisis to stay on the land and avoid bankruptcy. Told in voice-over in the first person singular by Jeanne Jordan, whose husband shot the film, it is hard to imagine this being made by anything other than a public service broadcaster.

The greatest contrast during this event is between the material you see all day on the screens in the Maschio Angioino Castle where the festival is being held and the programmes on the television screen in your hotel bedroom. Thanks largely, though not entirely, to Silvio Berlusconi, media magnate, politician, and, until not so long ago, Italian premier, Italy has moved faster than Britain towards a broadcasting universe ruled

entirely by market forces. The result is that while you see little but costume dramas, political documentaries, ballet, opera and orchestral music inside the castle, what you see in your hotel room is the familiar eye-glazing mixture of shampoo commercials, American cartoons and gormless game shows. It is difficult not to admire the Italians and BAI, their equivalent of the BBC, for somehow sustaining the Prix Italia as a showcase (yes, and talking house) for excellence. But it is also difficult not to be saddened by their seeming inability to sustain a higher quality in their own national output.

Will British broadcasters be able to resist ominously similar forces? Perhaps they will. Maybe the British revolution will, as we are assured, allow BBC programme makers to exploit market forces instead of being exploited by them. This year the British entries still sustain a remarkably high standard. ITV has entered Episode

1 of its tough yet entertaining drama serial about Bradford prostitutes, *Band of Gold*. Channel 4's documentary is *Return To The Dying Room*, a harrowing account of brutality in Chinese state orphanages. And in the arts category, ITV's entry is the opening episode of *The Beatles Anthology*. These have all been commercially produced, but the question must arise whether such impressive material would continue to emerge from British commercial broadcasters if ever the BBC ceased to occupy its position as public service broadcaster number one. Over the years the BBC has not only maintained high standards itself - it has kept the others good. Its own entries this year are at least as admirable, and possibly more so. Its documentary about Russian politics, *Travelling With Zhirkovsky*, is not only technically good but horridly funny. And its single drama, *Life After Life*, about an IRA killer rejected by his own community, must stand a pretty good chance of winning the drama prize.

The great problem is whether this stream of high quality television can be sustained under a radically altered BBC. What seems certain is that if this sort of public service broadcasting is allowed to wither and die, we shall never be able to resurrect it.

Opera/Andrew Clark

## Giovanna d'Arco

In the Royal Opera's Verdi festival, *Giovanna d'Arco* holds a distinguished place. It has never previously been staged at Covent Garden, and unlike *Don Carlos*, the production does not come courtesy of another house. You would have to travel far, and wait patiently, to hear *Giovanna d'Arco* elsewhere, and you would be lucky to find a cast as balanced as this.

So Monday's performance went a long way towards making good the festival idea. It was conducted with tight, athletic vigour by Daniele Gatti, and sung with appropriate elegance. The baroque opulence of Philip Prowse's setting will not please everyone, but it deserves credit for creating a strong theatrical platform for his singers.

And that is just what *Giovanna d'Arco* needs. Written in the full urgency of Verdi's galley years, after *Nabucco* and *I due Foscari* but before *Attila*, it encapsulates the best and worst of his output in the 1840s: melodic profusion, structural experimentation and elemental grandeur, compromised by cardboard characters, a rosy plot and a certain amount of falling-back on well-worn formulae.

Solera's libretto is a concoction of love, patriotism and religion, with the familiar Verdian father-daughter theme thrown in for good measure. This is neither the historical Joan nor Schiller's: she is a purely operatic creation, tailored for a prima donna who knows more about delicate *fioritura* than about heroism.

With such diverse ingredients, *Giovanna* seeses with abrupt contrasts, and the Royal Opera has sensibly chosen not to iron them out. Gatti allows virtually no stops for applause, and by combining the prologue and first two acts in a single 90-minute span, the production holds a good head of steam.

Just as Verdi and Solera tail-

ored the story to their own theatrical conventions, so does Prowse. He paints it in bold emblematic colours, hurrying the time-frame to embrace a vaguely Napoleonic milieu for the French, and 20th century berets and flak-jackets for the English.

But national enmities barely come into it. Prowse prefers to see *Giovanna* as a parable of innocence and purity sacrificed on the altar of war. With typical designer-flair, he finds a succession of atmospheric images to frame and comment upon each scene: a hollow, blood-spattered monument at curtain-up; a pastoral landscape to echo Giovanna's virginal spirit; and a tinselly, flag-waving victory procession, bringing out a *Boccacchio*-like streak of irony in Verdi's choral writing.

The stylised ambience of the coronation scene would have been most impressive of all, had not Prowse resorted to the cliché of dark spectacles for the church leaders. Gerry Jackson's lighting is a work of art in itself.

Prowse also knows when to leave well alone. The unseen spirits' chorus, looming through the stage void, is eerily effective, and the choreography of each tableau has been designed to give maximum purchase to the music.

In the title role, June Anderson is true to the softness of Verdi's Joan, but lacks any compensating trace of human credibility. Permanently dressed in a blood-spattered white dress, she goes too far in the direction of diva-caricature - especially in her death scene, redolent of *Lucia* - and one would have liked to hear a hint of steel in the voice.

Dennis O'Neill, looking more and more like a mini-Pavarotti, gives another reliable performance, proving an able match for Anderson in their intricate



June Anderson in the title role in Philip Prowse's baroque production

Act 1 duet. Vladimir Chernov excels as Giacomo, noble in timbre, crusty in appearance, he makes the most of a part that sounds like an early forerunner of Rigoletto. Gatti seems very much in control,

drawing imaginative responses from his wind players and making the Act 2 finale sound like one of Verdi's mature choral tableaux.

No production will ever make entirely coherent sense

of *Giovanna d'Arco*. But at the end of Monday's performance, we were left dwelling on its protean sweep rather than its primitive impulse. That is a measure of the Royal Opera's achievement.

Opera/David Murray

## Henze's 'Prince of Homburg'

The composer Hans Werner Henze turns 70 on July 1, and by way of a birthday tribute the English National Opera has mounted *The Prince of Homburg* - his third full-scale opera, composed 35 years ago - in Nikolaus Lehnhoff's Munich production from 1992. Eminent worth doing, but Lehnhoff's staging was designed originally not for the big Bavarian State Opera house, which is comparable to the RNO's Coliseum, but for the tiny Crivillies Theatre.

In Gottfried Pflz's stark Munich set, basically a council-chamber with varied lighting, *The Prince of Homburg* must have come across in the Crivillies-Theater as a strongly argued ethical debate, with almost every word audible. The dreamy Prince, called rudely into military service by a small 1675 war against the Swedes, disobeys orders in a fit of enraptured distraction and commands a premature attack. Though the battle is won, his rash action has incurred losses to his horror, the Elector of Brandenburg - his prospective in-law - demands the death penalty.

Henze and Ingeborg Bachmann drew their libretto from Heinrich von Kleist's classic play, but they emphasised the Prince's dreamy innocence as a virtue in itself. Henze has long been a gentle, romantic revolutionary, and they turned Kleist's hard-nosed conclusion - the Elector at last melts, only because the Prince admits that the original sentence was not "unjust" - into a paean to well-meaning, oddball dissidence.

As we see it at the ENO, the central conflict is excessively black and white and therefore somewhat toothless, perhaps because we miss so many of the words when the singers are anywhere but right up at the footlights. The Prince dreams on (never so vividly as at his first appearance, floating amid luminous blue ether), while concerned, sensible people scramble to save his bacon.

At the time, Henze was separating himself from serialist music, and also from Germany, in favour of neo-romantic tonality, Italy and the sun. Therefore he chose pointedly to assign austere serial music

to the duty-bound Prussians, while lavishing wistful, wheedling strains upon the Prince and his beloved Princess Natalie (and indulging his newfound enthusiasm for Stravinsky, too, who was still anathema to the serialists).

If the scheme is obvious, and too plainly schematic, at least it makes room for a whole series of Henze's characteristic formal inventions. Peter Coleman-Wright sings an upstanding baritone Prince, sounding much less dreamy than energetic. The Count, his friend and protector, is the excellent Christopher Ventris, and there are staunch performers Susan Bullock and Susan Bickley as Natalie and her aunt the Electress.

William Cochrane's formidable Elector shows him in much better form than in *Die tote Stadt* last November. Elgar Howarth conducts with a sure, knowledgeable hand. All in all, a worthy event, and interesting; but I fancy Henze intended to bring our waltzers over the Prince's plight more than this score manages to do.

Further performances tonight, June 28, July 1 and 5.

## Recital Noble but gloomy

Snatching an evening between his Covent Garden appearances in *Don Carlos*, José Van Dam gave a solo recital at the Wigmore on Thursday - his first ever in London. Why has nobody proposed it to him before? His distinguished operatic career goes back some 35 years, but he is also a searching interpreter of *Lieder* and *melodias* too.

Anyhow, for this long-delayed London concert the hall was packed. There is no bass-baritone more civilised and *soigné* than Van Dam. The voice is still superbly cultivated, perhaps a bit thinner at the top now. Though in opera he is a fine actor, on the recital platform he has no side; he comes modestly on to project his songs as lucidly and effectively as he can, anxious not to let himself get in the way.

In the event, it was a great relief when he struck Poulenc's

cheerfully indecent *Chansons gaillardes* at the end of his programme, and allowed himself a broad, lubricious glint. For what went before had been dauntingly sombre: Wolf's black last songs, the *Michelangelo-Lieder*, and Brahms's mostly melancholy op. 32, followed after the interval by expiring Duparc.

The Duparc songs might have expired less unobtrusively, and the Wolf and Brahms did played more muscular variety, had not two familiar rules been in effect. One is that almost any bass will emit slow songs as slowly and sonorously as he can, unless his pianist moves him firmly along. The other is

that a young pianist, however "equal" a partner he may be - and Van Dam shared the music generously with Maciej Pikulski, who was no shrinking violet but a creative accompanist - is not going to crowd a famous artist, twice his age.

The result was almost painfully eloquent. Still, Iberia's deft *Don Quixote* songs made amends later, along with the sly Poulenc set, and we went home in the glow of having heard a mature artist at his best.

D.M.

### INTERNATIONAL ARTS GUIDE

- AMSTERDAM**  
EXHIBITION  
Stedelijk Museum  
Tel: 31-20-5732911  
● A Hundred Photographs: exhibition showing a selection of works from the museum's photography collection, including works by Man Ray, Robert Frank, Nan Goldin and Nobuyoshi Araki; from Jun 29 to Aug 18
- BARCELONA**  
EXHIBITION  
Fundació Joan Miró  
Tel: 34-3-3291908  
● European Architecture 1984-1994: exhibition of a selection of maquettes, sketches and drawings of the projects that have competed for the Mies van der Rohe Pavilion Award in the period 1984-1994; from Jun 27 to Sep 1
- BERGEN**  
CONCERT  
Griegshallen Tel: 47-55-216100  
● Bergen Filharmoniske Orkester:

- with conductor Peter Guth and soprano Gabriele Fontana perform works by Johann Strauss Jr, Johann Strauss Sr, Luigi Arditi, Robert Stolz, Eduard Strauss, Josef Strauss and Carl Michael Ziehrer; 7.30pm; Jun 27, 28
- BERLIN**  
DANCE  
Staatsoper unter den Linden  
Tel: 49-30-2062951  
● Carmen Suite: a choreography by Alberto Alonso to music by Bizet/ Shchedrin performed by the Staatsoperballet. Soloists include Thiel, Schroeder, Brux and Freire; 7pm; Jun 28
- BONN**  
OPERA  
Oper der Stadt Bonn  
Tel: 49-228-7281  
● Il Barbiere di Siviglia; by Rossini. Conducted by Renato Palumbo and performed by the Oper Bonn. Soloists include Bruce Fowler and Carlos Alvarez; 7pm; Jun 29
- BRUSSELS**  
EXHIBITION  
Palais des Beaux-Arts  
Tel: 32-2-5078465  
● Ilya Kabakov. Sur le toit: installation of Ilya Kabakov's installation "Sur le toit" (On the roof), created for the Palais des Beaux-Arts; to Sep 8
- CHICAGO**  
THEATRE  
The O'Rourke Center for the Performing Arts

- Tel: 1-312-878-9761  
● Passion: by James Lapine and Stephen Sondheim, derived from Ettore Scola's 1951 neo-romantic "Passione d'Amore". Directed by Warner Crocker and performed by the Pegasus Players; Thu - Sat 8pm, Sun 2pm; to Jul 14 (not Mon)
- COPENHAGEN**  
EXHIBITION  
Nationalmuseet - The National Museum Tel: 45-33 13 44 11  
● Sultan, Shah and Great Mughal: exhibition focusing on the religion, history and culture of the world of Islam. The display includes exhibits from Danish museums and collections, together with photographs and illustrations; to Sep 30
- DRESDEN**  
DANCE  
Sächsische Staatsoper Dresden  
Tel: 49-351-49110  
● Ballet Dresden: perform *Alcina* by Tchaikovsky to music by Glass. Voluntaries by Tetly to music by Poulenc, and Paganini by Vassiliev after Lantovsky to music by Rachmaninov; 7pm; Jun 27, 30 (7.30pm)
- DUSSELDORF**  
EXHIBITION  
Kunstmuseum im Ehrenhof  
Tel: 49-211-892480  
● Glasdesign des 20. Jahrhunderts: exhibition of 20th-century glass works from the museum's collection; to Jun 30
- OPERA**  
Opernhaus Düsseldorf

- Tel: 49-211-89080  
● Die Fledermaus; by J. Strauss. Conducted by Hans Wallat and performed by the Deutsche Oper am Rhein; 7.30pm; Jun 29
- FLORENCE**  
CONCERT  
Teatro Comunale  
Tel: 39-55-211158  
● Orchestra a Coro del Maggio Musicale Fiorentino; with conductor Zubin Mehta and pianist Simona Pedroni perform works by Borodin, Rachmaninov and Mussorgsky. Concert on the Piazza della Signoria; 9.30pm; Jun 27
- GLASGOW**  
CONCERT  
Glasgow Royal Concert Hall  
Tel: 44-171-3326633  
● The Royal Scottish National Orchestra; with conductor and pianist Jean Bernard Pommer perform Mozart's *Ein Knecht*, *Nachtmusik*, *Piano Concerto No.25* in C and *Symphony No.39*; 7.30pm; Jun 27
- LONDON**  
CONCERT  
Royal Festival Hall  
Tel: 44-171-9604242  
● The Philharmonia Orchestra; with conductor Kurt Sanderling and pianist Mitsuko Uchida perform works by Mozart and Bruckner; 7.30pm; Jun 27  
Wigmore Hall Tel: 44-171-9352141  
● Yefim Bronfman: the pianist performs works by Scarlatti, R. Schumann, Tchaikovsky and Prokofiev; 7.30pm; Jun 27

- EXHIBITION  
British Museum  
Tel: 44-171-6361555  
● Kayama Matsuzo: New Triumphs for Old Traditions: the first major exhibition in the West of the art of Kayama Matsuzo, a deeply traditional Japanese artist who has in part modelled himself on the Edo period artist and designer Ogata Kōrin; to Jul 14
- OPERA**  
London Coliseum  
Tel: 44-171-8380111  
● Salome; by R. Strauss. Conducted by Lionel Friend and performed by the English National Opera; 8pm; Jun 27
- LOS ANGELES**  
CONCERT  
Hollywood Bowl  
Tel: 1-213-850-2000  
● The Magic of Mancini: the Los Angeles Philharmonic with conductor Esa-Pekka Salonen and special guests Quincy Jones, John Mathis, Andy Williams and Trisha Yearwood pay tribute to composer/conductor Henri Mancini; 7.30pm; Jun 30
- THEATRE**  
Ahmanson Theatre  
Tel: 1-213-972-0700  
● An Inspector Calls; by J.B. Priestley. Directed by Stephen Pridley and performed by The Royal National Theatre; Tue - Fri 8pm, Sat 2pm & 8pm, Sun 2pm, Jun 27 also 2pm; to Jun 30 (not Mon)
- MILAN**  
DANCE  
Teatro alla Scala di Milano  
Tel: 39-2-72003744

- Corpo di Ballo del Teatro alla Scala: perform *La strada* by Pistori to music by Rota and Petruschka by Poliakoff/Fokine to music by Stravinsky; 8pm; Jun 27, 29
- NEW YORK**  
MUSICAL  
Marquis Theatre  
Tel: 1-212-307-4100  
● Victor/Victoria; by Blake Edwards (book), Leslie Bricusse (lyrics) and Henry Mancini (music). Directed by Blake Edwards and starring Julie Andrews and Rachel York; Tue - Sat 8pm, Sun 3pm, Sat also 2pm; ongoing show (not Mon)
- PARIS**  
DANCE  
Théâtre National de l'Opéra - Opéra Garnier  
Tel: 33-1 42 86 50 22  
● Giselle: a choreography by Mats Ek to music by Adam, performed by the Ballet de l'Opéra National de Paris; 7.30pm; Jun 28, 27
- VIENNA**  
DANCE  
Wiener Staatsoper  
Tel: 43-1-514442960  
● Renato Zanella's choreographies *Symphony in Three Movements*, *Movements for Piano and Orchestra* and *La Sacre du Printemps* to music by Stravinsky; 7.30pm; Jun 27

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COMMENT & ANALYSIS

FINANCIAL TIMES

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# Bonn in the China shop

Germany has trodden on one of China's most sensitive toes in its dispute over Tibet. There is no doubt that China has used unacceptable repression in Tibet, but, as with Taiwan, the government in Beijing regards its claim to sovereignty as an issue of paramount importance. It takes any challenge to that claim as unwarranted interference and a general attack on its own authority.

Bonn should thus have known that it had to proceed carefully, especially since China is particularly sensitive to what it regards as the crime of "splittism". One factor is the lack of self-confidence in Beijing, as the central government grapples with social and economic change. Another is an apparent increase in separatist tendencies, notably in the Moslem province of Xinjiang.

China may have difficulty in understanding that a democratic government cannot suppress a parliamentary resolution such as the Bundestag passed on Tibet. But Bonn fanned the flames with its willingness to put public money into a high-profile conference addressed by the Dalai Lama.

That is poor tactics if the main aim is to build a close economic relationship with an important trading partner. Public German protests will also do little to help the people of Tibet. But the debacle raises yet again the question of whether economic relations can be divorced from matters of legitimate concern to western voters such as human rights.

The US experience is instructive. President Clinton discovered early in his administration that linking trade privileges to human rights was counter-productive. Trade opportunities were sacrificed for no compensating gain on human rights.

On the contrary, trade and the increasing prosperity that comes with it can be a civilising influence. Although trade embargoes may be justified in extreme cases, both sides will usually lose when trade policy decisions are taken on the basis of human rights rather than commercial criteria. This is the risk for Germany and China.

China has recently seemed to take an unhealthy pride in linking trade and investment deals to what it considers good political behaviour by its partners. But that is exactly what it complains the US did in seeking to link human rights to trade privileges, and it is an equally misguided and costly approach when applied by China. It will prevent deals from being considered on their intrinsic commercial merits, while, as Germany has now shown, trying to buy political favours with trade largesse can easily backfire.

Germany may find that the publicity given to the affair will spoil a constructive economic engagement with China. But it should not allow the argument to stop it pursuing this course. China will always resist outside pressure, but rising prosperity may eventually prompt it to decide for itself that the time has come to treat with decency those over whom it now holds such brutal sway.

# Mideast standoff

Last weekend's Arab summit in Cairo agreed that the only basis for an enduring settlement in the Middle East would be for Israel to return conquered Arab land in exchange for peace. That is the formula underwritten by the international community since the 1967 six-day war. It is also the means through which all the agreements between Israel and its Arab neighbours have been reached.

The Arab peace initiative was addressed firstly to Mr Benjamin Netanyahu's new government in Israel, which says it will negotiate peace "without pre-conditions" but will hang on to most of the Arab land which Israel still occupies.

The summit's conclusions were also an appeal to other nations, particularly to the US, to guarantee that land-for-peace will remain the agreed basis for negotiation. But Arab leaders warned that they would reconsider the rapprochement of the past five years if Israel tries to keep Arab land.

This is the stalemate confronting Mr Warren Christopher, US Secretary of State, who was in talks with Mr Netanyahu in Jerusalem yesterday and is due to meet President Hosni Mubarak of Egypt, and Mr Yasser Arafat, the Palestinian leader, in Cairo today.

The rapid US response is to be welcomed, but may prove to be nobody in the Middle East believes that President Bill Clinton will take any risks in the

region before he faces US voters in November. One of those risks would be to alienate the powerful Jewish lobby in the US.

Moreover, the credibility of the US as an intermediary has been dented among the Arabs by Washington's uncritical support for Israel's blockade of Palestinian territories and the 17-day bombing of Lebanon in April. Mr Netanyahu may be suspicious that the US's support for Israel at that time was intended to help the reelection of his predecessor, Labour leader Simon Perez.

While the Clinton administration is worried by Israel's hawkish turn, it seems to underestimate the desperation in the Arab leaders' response. They fear that they might lose the initiative to violent Islamic fundamentalists, who threaten them as well as Israel.

The US must therefore continue to insist on the legitimacy of the land-for-peace solution, as the European Union did at its Florence summit last week. The return of Arab land would provide an agreed basis for a common Arab-Israeli front against irregular forces, and meet one of Israel's two over-riding security concerns.

The other is a plan which Washington is looking at before Mr Netanyahu's election, a pact by which the US would come to Israel's defence in the event of attack by regular Arab armies. The US should now explore whether such guarantees can be made to work for peace.

# Amstrad's lessons

The news that Amstrad, the British electronics company, may be about to lose its independence is more significant than the company's £170m market capitalisation might suggest.

Once, Mr Alan Sugar, Amstrad's ebullient chairman, seemed to be leading the way towards a new future for western companies threatened by competition from east Asia. Now Amstrad is in talks about being taken over by Psion, a company with more innovative products but a much more conventional business model. The likely outcome provides some telling lessons about how to respond to Asian competition.

The Amstrad approach seemed to offer a way in which western companies could subcontract the manufacture of products to east Asia while retaining most of the value added themselves. Amstrad's skills lay in accurately understanding consumers' needs, specifying products to meet them, contracting for low-cost production, then marketing and selling them in western Europe. This process worked best at the moment when previously expensive, high-end technology suddenly became suitable for the mass market, initially in consumer electronics, then in personal computers.

The business model was flawed, in several ways. Because of its commitment to mass-market scale, it required a level of inventory that proved damaging when any particular product failed to

sell. It was also vulnerable to competition - for example, from the mass-market retailers through whom Amstrad reached its customers, or from premium-brand manufacturers cutting costs to eliminate Amstrad's pricing edge.

More damaging, it relied on a string of technologies ready to make the transition to a mass market. When, in the early 1990s, Mr Sugar lamented that "the day of the blockbuster product seems to be over", he was implicitly recognising that shorter product cycles have left little scope for Amstrad to take a product to the mass market. The initial innovator now plays that role.

The contrast with Psion, which makes electronic personal organisers, is striking. It is a technology-based company, with a premium-priced product, fat margins, and a high degree of vertical integration. Indeed, its reliance on internal technology explains its interest in Amstrad, which bought a GSM digital mobile-phone company three years ago. Dancall fills an important technology gap for Psion, which needs to be able to offer wireless personal organisers.

Amstrad's time had long gone; its likely disappearance is no surprise, even to Mr Sugar. The broader lesson is that exploiting cheap Asian production costs is not, by itself, a long-term strategy for a western manufacturing company. Control of technology and innovation is essential, too.

# Plug for the generation gap

Power generators fear the new EU agreement on energy liberalisation unduly favours the monopolies, say Neil Buckley and Simon Holberton

Last week's political headlines in Europe were dominated by the European Union summit in Florence and the agreement on a framework to lift the ban on British beef exports. But hours before the end of the beef war, EU energy ministers reached another agreement in Luxembourg that is likely to be more far-reaching in its implications and only a little less controversial.

After eight years of negotiations, they agreed to open the EU's \$175bn-a-year electricity market partially, but progressively, to competition. The deal will allow more large electricity users to shop around for the best prices inside the Union, and allow challenges to national monopolies such as that of Electricité de France (EDF), the state-owned French utility.

The deal's supporters, including the European Commission and business, say it will reduce EU industry's costs, improve international competitiveness and safeguard jobs. Its many detractors criticise it variously for going too far or for not going far enough.

"Electricity liberalisation goes to the heart of the debate between governments which support free markets and those committed to the public service credo," says a senior Commission official. "It touches very sensitive issues. We did very well to get any kind of deal."

The Commission calculates liberalisation could save industry \$40bn a year. But the agreement has been reached only after years of wrangling and rewrites, held back by unusually deep divisions between member states.

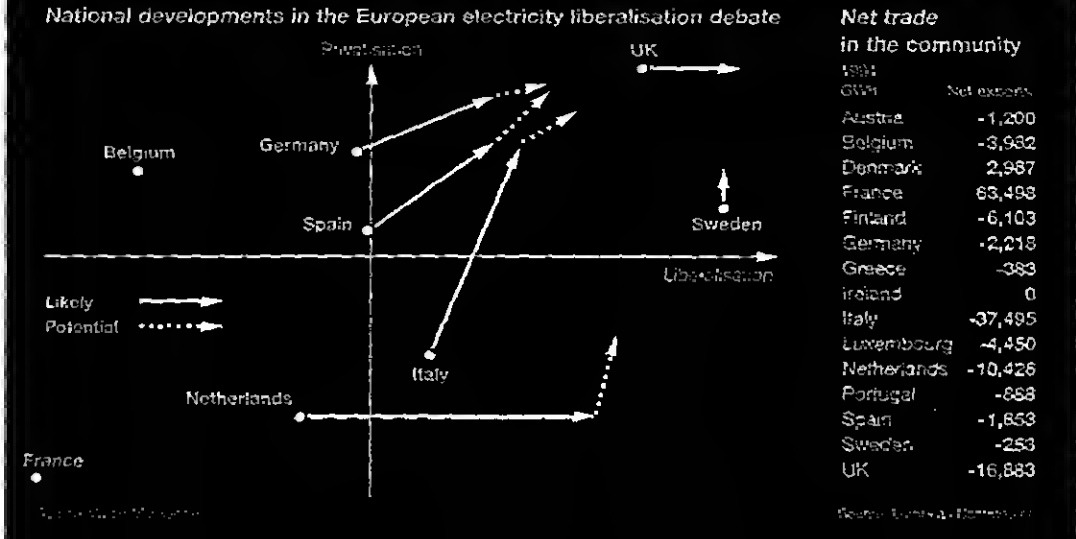
On one side, Germany, lobbied hard by its businesses which shoulder some of the highest electricity costs in Europe, led a pro-liberalisation group including the UK, the Netherlands and Scandinavia. On the other, France, under pressure from the unions to protect EDF, led anti-liberalisers including Belgium and Greece.

Agreement was only finally secured when Chancellor Helmut Kohl, of Germany, agreed a compromise with President Jacques Chirac, of France, to which other EU states unanimously, if sometimes grudgingly, signed last Thursday.

The agreement will allow generators to build power stations in any EU country. And it will require national monopolies for the first time to separate their generation, transmission and distribution businesses, producing clear pictures of their costs and prices which will allow new competitors into their markets. Each member state will have to open a minimum share of its power market to competition in three stages, which could start as early as January. Initially, they will have to open up 22.5 per cent of their markets, rising to 26.5 per cent after three years and 33 per cent after 2006.

Smaller states such as Belgium, Greece and Ireland, which fear the impact of competition on their small domestic power industries, have been granted an extended deadline for implementing the law.

The most controversial aspect of the agreement is the right of member states to choose between two methods of market opening. One, the solution favoured by Germany and the UK, is negotiated third party access, where customers can buy electricity freely from domestic or foreign generators, paying a fee to the distribution network for carrying the electricity. The other is the single buyer system favoured by



**Net trade in the community**

Country	Net exports
Austria	-1,200
Belgium	-3,582
Denmark	2,587
France	63,493
Finland	-6,103
Germany	-2,216
Greece	-383
Ireland	0
Italy	-37,495
Luxembourg	-4,450
Netherlands	-10,426
Portugal	-583
Spain	-1,853
Sweden	-253
UK	-16,883

Source: European Commission

**European electricity prices**

Country	Small	Medium	Large
Germany	2.47	7.91	6.37
Italy	7.47	6.59	4.89
Austria	7.30	7.23	6.04
Belgium	6.67	6.46	4.73
Spain	6.59	6.08	5.30
Luxembourg	6.59	5.43	4.40
Portugal	6.50	6.40	5.30
Ireland	5.46	5.06	4.15
Netherlands	5.42	5.26	4.42
France	5.25	5.21	4.10
UK	5.09	4.62	3.97
Greece	4.96	4.86	3.89
Denmark	4.68	4.68	4.23
Finland	4.36	4.29	4.23
Sweden	3.98	3.12	2.56

Source: European Commission

**European loads**

Load Category	Small	Medium	Large
Small	500 MW	1,750 MW/year	100% annual load factor
Medium	2.5 MW	8,750 MW/year	100% annual load factor
Large	10 MW	92,500 MW/year	100% annual load factor

Source: European Commission

energy," warned Mr Jim Murray, director of the Bureau Européen des Unions de Consommateurs, the European consumers' organisation.

Mr Alain Juppé, French prime minister, acknowledged this danger last week when he warned EDF it would need to "recast" its tariffs to meet competition from foreign producers, but making clear he expected any price cuts for industrial users to be matched by similar reductions for French households.

In the UK, which led Europe in introducing competition, the Electricity Association, the industry's trade association, laments that the plan will leave many EU countries less liberalised in 2006 than the UK was 15 years earlier. Competition in many places will not extend even into the small business sector, let alone into the household market.

Some in the industry believe it would have been better to leave electricity and gas liberalisation to the European Court. In five outstanding cases in the Court, the European Commission is challenging the right of national suppliers such as EDF to monopolise the import/export trade in electricity and gas. If the Court had ruled such monopolies contravened free trade provisions in the Treaty of Rome, that would have led to *de facto* liberalisation of gas and electricity.

"Maybe the European Court would have taken another two years to decide," says Mr Hilz of RWE Energy. "But now we won't have full liberalisation even after nine years."

The European Commission says leaving the issue to the Court risked ending up with a chaotic, unregulated liberalisation. It insists the progressive electricity liberalisation will allow the market to take hold, as already happened in sectors such as telecommunications.

"This deal partially opens the door," says a Commission official. "We hope the partially opened door will be kicked open by market forces."

Mr Bob Turgoose, a utilities' industry consultant at Price Waterhouse in London, agrees - he believes the agreement is the most important development for the European power industry in 50 years. "Here we have something that affects everyone and has great potential for change," he claims.

The success of liberalisation in countries such as Sweden, Finland and the UK will generate momentum for change that will be difficult to contain, he says. Competition in the UK, for example, will reduce electricity prices there by up to 10 per cent in real terms over the next two years.

"The trade off people made last week was between opening the market but limiting that opening to 33 per cent of the market," he says. "I just think they were not very good at seeing the big end of the wedge."

Just as important, the Commission believes achievement of an electricity deal clears the way for opening up the gas market. It may launch proposals for gas liberalisation before the year-end.

Ireland, which takes over the rotating EU presidency next month, is also keen to make progress on gas, as is the Netherlands, which succeeds Ireland and is one of the EU's biggest gas producers. Customers and pro-liberalisers will hope that, after the lessons learned with electricity, getting a deal on gas will not take another eight years.

# OBSERVER

## Goldstream's a hot tip

Perhaps because it looses tongues and storks' tongues, wine is one of a public relations man's better friends - until the morning after. But hitting the bottle has turned a tidy profit, with no hint of a hangover, for one UK firm.

City of London PR Group, a publicly traded company, stands to make a profit of about \$100,000 on its investment in Goldstream Australia, Australia's smallest listed winery, which is being taken over by Southcorp, a much larger producer. Many of City of London's clients are natural resources companies, which means it's no stranger to wine. But it also runs an investment portfolio on the side.

It was one of a group of UK investors which followed Garnet Harrison, when the former chief executive of Tyndall Australia and a two-time Tory parliamentary candidate, took the reins at Goldstream late in 1993.

According to Manchester stockbroker Laurie Beevers, a Goldstream director, the aim was to create a vehicle for other Australian investments but this didn't bear fruit because they "underestimated the vagaries of the wine business".

But the vineyard shocked its acreage in Victoria's Yarra Valley and its Goldstream Hills plant near

## On the wall

Mirror Group Newspapers, it seems, has yet to verse itself in the semantic politics of Northern Ireland. When the company announced last week it was acquiring The Newsletter, the province's staunchly pro-unionist daily, the accompanying press releases referred to the paper's operations in the "six counties" of the north of Ireland.

Only someone pretty unfamiliar with the province's sectarian divisions would fail to recognise the hand of an Irish nationalist in such a description. When The Newsletter reported the deal in its own pages, it quietly amended the press release, to refer to Northern Ireland.

David Montgomery, the Mirror boss and an Ulsterman, should be blushing.

## Like lambs

Germans are becoming increasingly incensed at the "war" the British tabloids have declared ahead of tonight's Germany-England football match. Yesterday they began getting their own back.

Bild, the tabloid paper, which is leading the assault for Germany, had 11 questions for the British.

Why, as the motherland of football, have you never won the European Championship? Why do you wear winning trousers when you go into the sauna? Why can you not beat your own colonies at

## Room quay

A travel tip for those on business in Ho Chi Minh City. It might be worth verifying, before you check into the Saigon Floating Hotel, that it won't be slipping its moorings at the dead of night and sailing off down the Saigon River.

It seems the hotel, which was towed all the way from the Great Barrier Reef in Australia in 1989, has had its licence terminated and can no longer tie up at a quay in central Ho Chi Minh City.

Known to foreign residents fondly as "The Floater" and jointly run by Japan's EIE International and Saigon Tourist, it gained fame as the only international standard hotel in Vietnam's southern city in the pioneering days of foreign investment in the early 1990s. The authorities have repeatedly threatened to set it adrift by cancelling its licence.

Question is, will they really do it this time?

## 100 years ago

The Venezuelan Difficulty Sir Julian Pauncefote, Her Majesty's representative in Washington, called yesterday on Mr. Olney, the Secretary of State, and requested him, as Great Britain is not represented in Venezuela either by a Minister or a Consul, to obtain the views of the Venezuelan Government on the Harrison incident. The Americans have agreed to take such steps as are necessary to secure the immediate release of Mr. Harrison. The Venezuelan Minister in Washington, Señor Andrade, called on Mr. Olney later in the day, and assured him that an exaggerated importance had been attributed to the Harrison incident. No indignity had been offered to Great Britain, nor had any wrong been intended.

*[Harrison was detained by the Venezuelan authorities during a border dispute.]*

## 50 years ago

Makers of A Million Cars Advertisement: Austin, makers of a million cars. The first Austin was built in 1906. With pride we can now announce completion of the millionth. And now for the second million, with production already higher than before the war and steadily increasing, Austin is making every effort to meet home and overseas demands. The Austin - you can depend on it.







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IN BRIEF

Shares in Allianz jump on 52% rise

Shares in Allianz raced ahead after the German insurance group announced a 52 per cent rise in net profits to DM2.02bn (\$1.3bn) helped by the favourable impact on its tax bill of losses carried forward from its east German property and casualty subsidiary. The shares closed DM68, or 2.7 per cent, higher at DM2.611, outpacing the overall market which was up only 0.5 per cent, with the Dax index reaching a record 2,573.9 points. Page 16

**Fiat seeks \$1bn credit facility**  
Fiat, the Italian vehicle and industrial group, has asked Citibank International and Deutsche Bank Luxembourg to organise a \$1bn multicurrency credit line, its largest ever international credit facility. The company holds its annual shareholder meeting in Turin today. Page 16

**Axa sets price for New York listing**  
Axa, the French insurance group, announced that its shares to be listed on the New York Stock Exchange are to be priced at FF274 each. Page 16

**Crédit Lyonnais in securitisation issue**  
Crédit Lyonnais, the French state-owned bank, announced a FF75bn (\$900m) securitisation issue against one of its specialised loan portfolios in the largest such operation yet launched in the country. Page 16

**Dickson Concepts acquires Seibu stores**  
Dickson Concepts, the Hong Kong-based luxury wholesaler and retailer, is to take control of the Seibu department stores in Hong Kong and Shenzhen, in southern China, for HK\$180m (US\$22m). Page 20

**St George bid for Metway in the balance**  
Shares in Metway bank, the Australian regional bank, slid 9 cents to A\$4.61 as analysts decided the chances of the Sydney-based St George Bank succeeding with its A\$810m (US\$640m) bid were diminishing. Page 20

**Prudential to float off reinsurance arm**  
Prudential, the UK's largest life insurance group, joined the accelerating process of consolidation in the UK financial services industry, announcing it would float off its Mercantile & General reinsurance subsidiary and expand its presence in life insurance and retail banking. Page 21; Lex, Page 14

**Pson plans £234m bid for Amstrad**  
Pson, the UK handheld computer manufacturer, plans to pay £234m (\$358m) in shares for Amstrad, the UK computer and digital telephone group. The two companies confirmed they were in discussions that could lead to Pson offer for Amstrad. Page 22; Lex, Page 14; Editorial Comment, Page 13

**Gold rush**  
Production of gold jewellery in Asia more than quadrupled between 1986 and 1995, Mr Michael Kile, manager of business development for Gold Corporation, told delegates at the Financial Times World Gold Conference. Page 23

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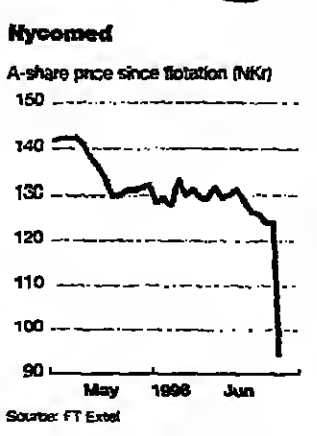
Chief price changes yesterday

FRANKFURT (DM)		PARIS (FF)	
Alcatel	2811 + 66	Air Liquide	965 + 16
BMW	5115.5 + 0.5	Changin Int	238 + 28.2
Boffal	1134 + 31	End Linn	1204 + 15.5
Boffal	853 + 9	Imat	746 + 17
Boffal	576 + 12	Passport	713 + 10
Boffal	391 + 17	Pecler	802 + 16
NEW YORK (\$)		HONG KONG (HK\$)	
Alcatel	454 + 14	Alcatel	801 + 21
Boffal	574 + 24	Boffal	540 + 21
Boffal	574 + 24	Boffal	548 + 19
Boffal	434 + 35	Boffal	653 + 16
Boffal	144 + 34	Boffal	771 + 12
Boffal	184 + 3	Boffal	784 + 25
LONDON (£)		LONDON (£)	
Boffal	250 + 100	Boffal	8.85 + 0.23
Boffal	338 + 13	Boffal	1.01 + 0.23
Boffal	308 + 20	Boffal	30.80 + 1.30
Boffal	448 + 32	Boffal	12.30 + 0.50
Boffal	448 + 32	Boffal	1.32 + 0.14
Boffal	448 + 32	Boffal	1.27 + 0.10
TORONTO (\$)		TORONTO (\$)	
Boffal	10.00 + 0.75	Boffal	105.00 + 4.00
Boffal	11.10 + 0.85	Boffal	97.00 + 3.50
Boffal	11.75 + 0.50	Boffal	90.00 + 3.50
Boffal	15.10 + 0.80	Boffal	28.25 + 4.00
Boffal	6.00 + 1.00	Boffal	43.00 + 5.00
Boffal	1.52 + 1.34	Boffal	40.00 + 4.00

Nycomed loses 23% after warning

By Hugh Carnegie in Stockholm  
Shares in Nycomed, the Norwegian pharmaceutical group, plunged almost 23 per cent yesterday after the company warned that profits this year would be well below market expectations. The earnings reverse, caused by fierce price competition in the US for X-ray contrast agents, its biggest product line, reignited speculation that Nycomed could become a takeover or merger target. Nycomed, with sales last year of Nkr4.8bn (\$1.3bn), has only been an independent company

just over a month. It was demerged in May from Hafsund, an energy producer, in a move which itself followed the collapse last year of a planned merger with Ivax, the US pharmaceutical company, following objections by a group of shareholders to foreign intervention. Nycomed's most-traded A-share tumbled downwards Nkr28 to close at Nkr95 after the warning. The shares had traded as high as Nkr148 since the demerger. The company said price pressures in the US had intensified since the first quarter, when Nycomed's main diagnostic imaging division suffered a fall in operating profits from Nkr570m to Nkr550m. It said full-year profits this year would be "closer to the 1994 level than the 1995 level". Analysts had expected earnings per share to reach as high as Nkr14.5, against last year's Nkr11.25. In 1994, earnings per share were Nkr7.55. Nycomed has experienced a tough fight in the US with competitors such as Bracco and Mallinckrodt of the US and Schering of Germany. In the market for agents which are injected into patients to enhance X-ray images and improve diagnosis. The Norwegian company has a leading 35 per cent share of



Michael Price sells Heine Securities

By Maggie Urry in New York  
Franklin Resources has agreed to buy Heine Securities for \$615m in cash and shares, before a possible \$193m performance bonus, in a further consolidation in the US mutual fund industry. The deal follows Monday's announcement of Morgan Stanley's agreement to acquire Van Kampen American Capital. Heine advises the Mutual Series Fund group, whose investors must approve the transaction. It is owned by Mr Michael Price, the outspoken investment manager who last year bought a 6 per cent stake in Chase Manhattan - a move which, in part, led to the merger of that bank with Chemical Bank. Mr Price, 44, has agreed to stay with Franklin for at least five years and will invest \$150m of the sale proceeds in the Mutual Series Fund, retaining at least \$100m of that investment for five years. The acquisition of Heine will add \$17bn to Franklin's assets under management, taking the total to \$162bn. Many mutual fund groups are seeking to expand and broaden their range of assets under management in the face of increasing competition in the market. The deal will widen the range of mutual funds Franklin can offer investors. It is best known for its fixed income funds, and, since the acquisition of Templeton Galbraith & Hansberger in 1992, its international equity funds. Heine's strength is in US equities. Its four funds have a strong investment record and each has a five-star rating from Morningstar, the highest accorded by the firm which ranks mutual funds by performance. Heine, also feeling the lack of a broader product range, is launching a European equity fund next month. Franklin aims to increase sales of Heine's funds by selling them through brokers. Franklin's existing funds are sold through brokers, and investors in them pay a commission. Heine's funds are sold directly to the public with no commission charged - an arrangement that would continue after acquisition, said Mr Greg Johnson of Franklin. Under the terms of the deal, Franklin will pay Mr Price \$550m in cash and issue 1.1m Franklin shares to him. Franklin's shares rose 8 1/2% to \$59 1/2 in morning trading.

Eurotunnel investors marshal blocking vote

By Andrew Jack in Paris and Geoff Dyer in London  
Associations representing individual investors in Eurotunnel, the troubled Anglo-French operator of the Channel tunnel link, believe they may have enough support to block the group's restructuring plan. Organisers from three separate groups gathering proxy votes from shareholders claimed yesterday they had collected more than 58m. There are nearly 920m Eurotunnel shares and, based on previous voting attendance at shareholder meetings, the blocking group could be strong enough to vote down resolutions. Ms Sophie L'Hélias, a corporate governance consultant, has gathered more than 47m votes through an exercise co-ordinated by Investir, a French investors' magazine, which encouraged readers to complete in her name proxy forms it published. Mr Christian Cambier, head of the 3,000-strong Association of Eurotunnel Shareholders, which formed in France last month, said he had gathered a further 8m votes which he had assigned to Ms

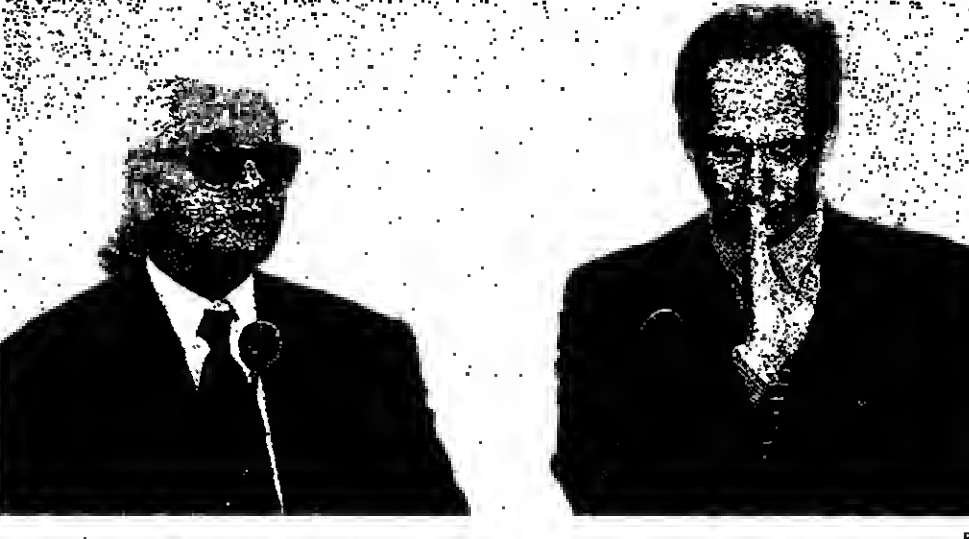
L'Hélias. Separately, Adacte, the Association for the Defence of Eurotunnel Shareholders, claimed a further 8m votes from members, who have given their proxies to its chairman, Mr Albert Jauffret. However, divisions between the associations could threaten a united front in the Eurotunnel annual general meeting on Thursday afternoon. Mr Jauffret, who has collected proxies in his own name and taken a more critical stance towards Eurotunnel, yesterday threatened to call for the resignation of a number of the group's directors, whom he accused of boding conflicts of interest. The other groups want to find a way to demonstrate their strength in an effort to ensure that the degree to which they are penalised by creditor banks in the current restructuring is minimised. Mr Cambier said he did not want to propose radical changes in the board of Eurotunnel at the moment. The real test will come when Eurotunnel is required to hold an extraordinary general meeting and present a detailed restructuring plan for approval. Eurotunnel refused yesterday

to say how many proxies it had solicited on its own behalf. Following speculation that the UK government had refused to extend Eurotunnel's franchise, the department of transport said yesterday it had not yet received a formal proposal from Eurotunnel or the French government about an extension. It said it would wait to see any official application before deciding whether or not it was in the public interest. The issue was raised by Mr Jacques Chirac, the French president, during his state visit to the UK last month.

Quelle moves to capture a niche and remain leader in Germany's mail order sector

Karl Lagerfeld has designs on democratic luxury

By Judy Dempsey in Berlin  
Quelle, Germany's large mail order company re-established after the second world war to provide cheap, quality clothes for Germans, yesterday moved up-market by signing a contract with Mr Karl Lagerfeld, the luxury designer. This is the first time the group has attracted an international designer and shows how much Quelle - and Germany - has moved away from the immediate post-war years when Germans in their war-torn country could hardly afford a jacket. However, it also continues a philosophy set out by Mrs Grete Schickendantz, Quelle's founder who died two years ago, who always believed that her mail order service should provide affordable quality as well as move with the times. Mr Lagerfeld was yesterday more than happy to continue this philosophy. Wearing a small black fan and sporting dark glasses, he told enthusiastic Berliners this was a great opportunity to "democratise luxury". His audience was given a sample of Lagerfeld's 30 designs which will be included in Quelle's autumn and winter catalogues. As expected, the colours are bright, the form is chic and the variety of clothes spans day and evening wear. And true to Mrs Schickendantz's concern for value for money, the clothes will sell from DM65 to DM795 (\$43-\$520) and will clothe the slim to the well-



Chic on the cheap: Fashion designer Karl Lagerfeld (left) with Steffen Strunne, chairman of Quelle

Quelle, which last year had a turnover of more than DM12bn worldwide, with the German market accounting for DM8bn of sales, is confident of success particularly as Mr Lagerfeld was involved in all the stages of the design and launch of the collection. "He did everything - from choosing the material to doing the photos and layout," said Mr Erich Jeske, a Quelle official. The group is confident it will capture a niche in Germany's mail order market, an increasingly competitive sector in which Quelle has managed to remain

market leader largely through diversifying, expanding in eastern Europe and tapping Germany's nascent home television shopping market. Its catalogues, the size of a telephone directory, sell anything, from a small gas cooker to... a Lagerfeld dress.

Barry Riley Secure home sought for the 'orphan' billions

British actuaries are conducting their own peculiar version of the stakeholder debate. It is about how to share out "orphan" assets between shareholders and policyholders - a problem that arises in proprietary life assurance companies that sell with-profits policies. A professional working party has determined that the quarterly named orphan estate should be redefined as the inherited estate (IE). These ownerless assets in life company balance sheets arise mostly from actuaries' mistakes dating back several decades. One important source relates essentially to the 1960s when life companies began investing in equities rather than fixed interest securities - but their income-based methodology did not catch up for about 20 years. Nowadays, with-profits policies are awarded bonuses in line with calculations of asset shares. But there was an interim period in which actuaries thought they were being properly cautious in tucking away "temporary" capital gains as extra reserves. Yesterday's prudence, however, has become today's embarrassment. Thus, maturing with-profits policies in the 1960s and 1970s often did not receive their full share of investment growth. These unallocated surpluses, bolstered by fat investment returns, have become seriously eroded. The Prudential's inherited estate may be \$2.5bn (\$6.8bn). Legal & General last year agreed with the Department of Trade and Industry over the reclassification of £1.5bn.

contracts somewhat. But by their very nature, they rely on smoothing and cross-subsidies. Recently, the progressive reductions in reversionary bonuses have created a difficult climate. Two offices, Pearl and Eagle Star, are warning 50,000 home buyers that their with-profits savings plans will probably not pay off their mortgage loans. Monday's session revealed some deep splits of opinion. Many actuaries do not agree with the simplest approach of dividing the orphan assets according to the 90:10 ratio that applies to normal investment surpluses in the with-profits funds of most proprietary companies. It can be argued that once the reasonable expectations of policyholders have been satisfied, the balance is attributable to shareholders - who must take the rough as well as the smooth. But the arguments are never simple. Several offices have apparently begun nibbling at the IE by maintaining their recent and current bonuses at unrealistically high levels. If so, have they already raised the PRE in those cases? Actuaries are wrestling with professional issues... how can they escape the blame for this mess? On the other hand, do actuaries have a moral duty to protect policyholders? The more political seek an easy way out. Perhaps the IE can be diverted to finance the fundamental business re-engineering that most life offices require. Both policyholders and shareholders might benefit from that. But all agree that future methodology must be watertight. The "unwitting plunder of past generations", as one actuary put it, must not be repeated.

The prudence of yesterday has become today's embarrassment for actuaries

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## COMPANIES AND FINANCE: EUROPE

## Allianz ahead 52% at DM2.02bn

By Andrew Fisher in Frankfurt

Shares of Allianz raced ahead yesterday after the German insurance group announced a 52 per cent rise in net profits to DM2.02bn (\$1.31bn), helped by the favourable impact on its tax bill of losses carried forward from its east German operation.

Although Allianz said in February that earnings would rise faster than pre-tax profits - which rose by 34.5 per cent to DM3.04bn - analysts were still surprised by the sharp increase in earnings per share from DM58.60 to DM87.20. The loss carry-forward from Deutsche Versicherungs, the east Ger-

man property and casualty subsidiary, was DM1.4bn. The shares closed up DM68, or 2.7 per cent, at DM2.611, outpacing the overall market which was up by only 0.3 per cent, with the Dax index of 30 blue chips reaching a record 2,572.9. Allianz, with extensive stakes in German banks and industry, is a main component of the Dax.

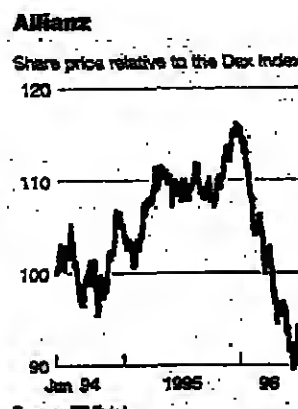
The company said the quality of its underwriting result improved considerably. It has improved its insurance portfolio by weeding out high-risk business and concentrating on profitable lower-risk clients. The positive claims experience continued in the first

quarter of 1996, while investment income benefited from continued favourable capital market conditions. But premium income rose only moderately in the first quarter, with neither the economy nor customer demand showing much growth.

Premiums have been held down as claims have stabilised. Last year's premium income was 7 per cent higher at DM70.5bn, mostly due to the first-time inclusion of Elvia of Switzerland and Lloyd Adriatico of Italy. The rise would have been 9 per cent but for the stronger D-Mark which sliced DM1.6bn from the total. The underwriting result

showed a loss of DM685m due to the payment into claims equalisation reserves of DM1.2bn, against DM800m in 1994. However, under previous accounting regulations, the underwriting result would have moved from a DM342m loss to DM88m profit. The new rules mean pension provisions and office equipment depreciation now have to be charged to the underwriting account.

The non-underwriting result rose from DM3.39bn in 1994 (adjusted for the new accounting regulations) to DM3.73bn, helped by improved capital market trends. Lower interest rates and rising share prices led to reduced write-downs on



Source: FT Index

the securities portfolio. Total income from investments - some DM250bn - increased, although falling interest rates reduced yields on new investments.

## Record international borrowing for Fiat

By Andrew Hill in Milan

Fiat, the Italian automotive and industrial group, has appointed Citibank International and Deutsche Bank Luxembourg to organise a \$1bn multi-currency credit line, its largest ever international credit facility.

Proceeds of the new credit line will be used partly to redeem bonds due to expire shortly, and partly to refinance a five-year \$400m credit line negotiated in November 1994.

The new credit line will last seven years, longer than any previous Fiat credit facility on international markets, and should allow it to service its loans at a lower cost than the old \$400m facility.

The company is to hold its annual shareholder meeting today in Turin, the first chaired by Mr Cesare Romiti, who moved from chief executive to chairman when Mr Gianni Agnelli stepped down earlier this year. Mr Romiti will be flanked by the new chief executive, Mr Paolo Cantarella, former head of Fiat's core automotive division.

Mr Roberto Testore, Mr Cantarella's replacement at Fiat Auto, underlined the challenge facing Fiat, when he warned on Monday that the Italian car market was still flat, and that the European market was only expected to rise 3 per cent, excluding Italy.

In the first quarter of this year, Fiat's pre-tax profits fell 24 per cent on the equivalent period last year as profitability in Brazil was hit and the lira continued to strengthen.



Cesare Romiti: to address first annual meeting as chairman

In 1995, the group's net profit doubled to L2,147bn (\$1.4bn), confirming its recovery from 1993's record losses.

Fiat is aiming to keep up the rhythm established during the recovery years by producing 15 new models between 1997 and the end of the century, backed by further expansion into emerging markets.

Its new credit line will be arranged at 16 basis points above the London interbank offered rate, whereas the old facility was at 30 points above Libor. The utilisation fee will be set at 2 basis points, if Fiat uses more than a third of the total amount, and 4 basis points if it used more than two-thirds. The commitment fee - paid if the credit line is not used - will be eight basis points a year.

Fiat said the credit could be used in all convertible currencies, including the Yen, and, as soon as it is available, the Euro. The credit line will be set up through the group's wholly owned subsidiary Fiat Finance & Trade.

## NEWS DIGEST

## Volvo executive to head NedCar

Mr Christian Dewulf, currently managing director of Volvo's Ghent production base in Belgium, will next week become chief operating officer of NedCar, the joint venture grouping the Dutch government, Volvo of Sweden and Japan's Mitsubishi Motors. Mr Dewulf, a Belgian, will take over in January as chief executive, replacing Mr Frans Sevenster, 56, who is leaving the company. Mr Sevenster said yesterday the change marked the end of a five-year transformation of NedCar, which produces 180,000 vehicles a year, into a pure production unit. It has already shed the components and marketing divisions which accompanied its former existence as a tie-up between Volvo and Daf, the defunct Dutch carmaker.

Mr Sevenster described his 46-year-old successor as "a real production man" now needed for the operation, which produces the Volvo S40/V40 and Volvo 400 series as well as the Mitsubishi Carisma. Mr Masaya Arimishi, 58, is joining from a MMC plant in Japan as NedCar vice-president. The two current vice-presidents, Mr Curt Germundsson and Mr Norio Takehara, are returning respectively to Volvo and MMC.

The streamlined structure, under which the management board is being obliged to give more power to Mr Dewulf, was described by trade unions as a "turnaround" move. They fear the moves may precede a withdrawal by the state from the venture, perhaps by selling its one-third stake to the two industry partners.

Gordon Crabb, Amsterdam

## Swedbank buys stake in rival

Swedbank Sweden's second-largest bank measured by asset value, yesterday bought a near 5 per cent stake in Föreningsbanken, the country's fifth-biggest bank, and said it believed an eventual merger would benefit both groups. The move followed abortive talks late last year on co-operation between the two banks.

Swedbank, known as Sparbanken Sverige domestically, said it had no immediate plans to buy more Föreningsbanken stock. It bought 13m Föreningsbanken A shares, or 4.98 per cent of the capital and voting stock - a stake worth almost SKr290m (\$44m) at current market prices. But it made clear the purchase of the stake was a strategic move to position the group for an anticipated new round of restructuring in the Swedish banking sector following its recovery from crippling loan losses in the early 1990s.

Föreningsbanken, which has the Federation of Swedish Farmers as its biggest shareholder, has long been the subject of merger speculation. But it immediately rejected Swedbank's renewed overtures, saying it was determined to remain independent. "The board of directors reached the conclusion that co-operation with Sparbanken would not be beneficial to our customers and shareholders. No discussions are currently being held with Sparbanken, nor are any such discussions planned," the bank said.

Swedbank, with assets of SKr467bn at the end of last year, is concentrated on the Swedish retail banking sector, where it dominates the mortgage market through its subsidiary Symbat. But it is fighting a tough battle for market share, especially with Nordbanken, at a time of increasing competition in the financial services sector.

Hugh Carnegie, Stockholm

## Foreign orders lift Hochtief

Hochtief, the German construction group, benefited from a big increase in orders from abroad in the first five months of this year. Mr Hans-Peter Ketzel, chairman, said a strong performance in foreign markets had more than compensated for exceptionally weak domestic conditions, where the effects of a weak economy were exacerbated by a cold winter. The company's total construction output rose 9.7 per cent to DM4.4bn (\$2.9bn) in the first five months of 1996, compared with the corresponding period a year ago.

The Essen-based company also announced an increase in both incoming orders and order backlog in the period. Incoming orders stood at DM5.1bn, up 15 per cent, and the order backlog as of May 31 was DM11.7bn, a rise of 8.9 per cent. Mr Ketzel, Hochtief's chairman, told the group's annual shareholders' meeting that the five-month figures did not include a DM2.4bn commission, won in June, for the construction of a new airport for Athens. He noted that this would lead to a further rise in orders at the group's next interim report.

Domestic incoming orders in the first five months were 9.3 per cent lower than a year ago. However, new orders from abroad were up 81 per cent on the corresponding period in 1995. Foreign business now accounts for half of total

outstanding orders, which stood at some DM11.7bn at the end of May. The chairman added that it was "too early" to give a forecast for the whole of 1996. Hochtief raised its construction output in the domestic market by 3.5 per cent in the period despite the sectoral weakness. However, foreign output grew by a much faster 22 per cent from year-on-year levels.

AP-DJ, Frankfurt

Philips, the Dutch electronics group, has expanded its UK interests through the purchase of Leisuresoft, a distributor of computer peripherals and entertainment software. The company will be part of Philips Media, which in the past year has bought similar operations in France and Germany but was seeking to strengthen its UK sales team. Mr John Hawkins, who as Philips Media vice-president will head the UK operations, said yesterday the acquisition was "a means of strengthening our position in the competitive UK market". No price was disclosed for Leisuresoft, which was founded in 1983.

Gordon Crabb

## Crédit Lyonnais in securitisation move

By Andrew Jack in Paris

Crédit Lyonnais, the French state-owned bank, yesterday announced a FF15bn securitisation issue against one of its specialised loan portfolios. It is the largest such operation yet launched in the country.

The fund, named Tritaphar 06-96, comprises loans made to pharmacists by the bank's interbank subsidiary, which is one of the leading institutions for providing credit to the liberal professions in France, such as lawyers and doctors. It will help Crédit Lyonnais in its efforts to cut costs. The bank is facing growing financial difficulties against the backdrop of intense competition in the French banking sector. The bank also wants to improve the efficiency of its asset management.

The fund will be split into four parts, of which three will be quoted on the French stock exchange.

It will be guaranteed by Crédit Lyonnais and Bayerische Vereinsbank, and has been classified as AAA by the

leading credit rating agencies. Crédit Lyonnais said the new fund brought to FF15bn (\$2.89bn) the total amount of securitisation it has undertaken. This follows FF16.1bn in 1994 and a further FF14bn during last year.

In addition, the bank is considering securitising about FF90bn of the loan it made to EPRF, a company underwritten by the French state as part of the bank's restructuring plan agreed last year.

Under that plan, FF135bn in assets were removed from Crédit Lyonnais' balance sheet for sale over the next few years through an independently managed organisation called Consortium des Réalisations which deals with EPRF.

The bank said that securitisation of loans to pharmacists was particularly attractive because of the tight regulations and the security of the assets against which the loans are made.

However, it said it would also consider securitisation of loans to other liberal professions in the future. Details, Page 24

## Axa sets price for NY listing

By Andrew Jack

Axa, the French insurance group, yesterday announced that its shares to be listed on the New York Stock Exchange are to be priced at FF274 each. Trading in the shares began yesterday.

Strong demand has meant the number of shares to be offered has been increased from 3.5m initially planned to 4.2m.

Trading will be in the form of American Depositary Shares, for which there are two for each share in Axa SA, the quoted French holding company. The ADSs opened up 8% at \$264.

Axa said 55 per cent of the shares had been offered in the US market, with the remainder in other markets outside France, including a substantial proportion in Europe.

The transaction will result in a post-tax FF110m (\$21.2m) gain.

Mr Claude Bébéar, Axa chairman, said: "Our listing will enable us to broaden our international shareholder base, to raise our profile in international capital markets and to gain access to the world's larg-



Claude Bébéar: listing will help broaden shareholder base

est and most advanced financial markets." Mr Henri de Castries, one of the group's directors, said that Axa always pursued an "opportunistic" approach to potential acquisitions and financing projects, but there were no immediate plans to raise funding in the US as a result of the quotation.

Axa has also expressed interest in seeking listings in London, Tokyo and other markets in which it has important activities, but Mr de Castries said no decision had yet been taken.



Henri de Castries: Axa always pursued an opportunistic approach to potential acquisitions and financing projects

He said the group had not faced any particular investor concern during the marketing of the US shares over the discrepancy in net profits for 1995 between FF2.7bn under French and FF2.24m under US accounting standards.

The investment banks advising on the listing were Goldman Sachs and Donaldson, Lufkin & Jenrette, which is majority-owned by Axa.

The announcement came on the day that Scor, the French insurance group, said it planned to seek a listing on the New York Stock Exchange.

## BZW-led group to handle Polish copper privatisation

By Christopher Bobinski in Warsaw

The privatisation of KGHM, the Polish copper producer - the largest planned offer of stock in central Europe since the fall of communism - is to be handled by a consortium made up of BZW, Union Bank of Switzerland and the local Wielkopolski Bank Kredytowy.

The BZW consortium is believed to have offered to underwrite the deal, which would value KGHM at more than \$2bn, for a fee of only 2.3 per cent. In the latest example of narrowing margins in equity offerings.

The decision, announced yesterday by Poland's privatisation ministry, puts the sale of 51 per cent of KGHM's equity on track for the first quarter of next year, even though the price of copper on the London Metal Exchange has stabilised at a 24-year low, jeopardising the prospect of profits for the combine, which produces around 5 per cent of world output of the metal.

BZW and its partners were chosen from eight short-listed bidders which included Merrill Lynch, CSFB and SBC Warburg. The winning bid was reported to have carried the most competitive price offer overall in a contest in which Mr Wieslaw Kaczmarek, the

privatisation minister, said the "quality of the proposals was equal".

According to the government and management at KGHM, which reported a 481.9m zlotys (\$176m) net profit last year, the privatisation would see around 10 per cent of the equity sold on the Warsaw Stock Exchange with 15 per cent reserved for the 30,000 workers.

Another 25 per cent would be placed abroad through Global Depository Receipts.

KGHM's profits last year were buoyed by a copper price of \$3,000 a tonne, while the combine's break-even point is reported to be \$1,800 a tonne.

Subscriptions for the Hungarian offering of Global Depository Receipts in Cofinec, the central European packaging group, closed on Monday after only one day due to high demand, writes Kester Eddy in Budapest.

The total of 90,000 GDRs was more than twice oversubscribed, with the tranche of 30,000 GDRs allocated to Hungarian institutional investors attracting more than 120,000 applications.

The offering had been planned to last five days.

Nevertheless, for Hungarian domestic investors it was unusual to pay cash in advance, with no discount or

"additional incentives" such as credit or part-payment in compensation coupons, brokers said. "We haven't seen the queues for an offer for a long time either," one added.

The GDRs were offered to Hungarian investors at F16,425 each, equivalent to the initial public offering price of \$42.35 per GDR.

The Hungarian offering, representing 3.8 per cent of the enlarged share capital, has raised \$4m for Cofinec before expenses, and the IPO \$96m, consisting of \$3m for Cofinec and \$93m for selling shareholders. Listing on the Budapest Stock Exchange is expected in mid-July.

## Lada manufacturer lifts production

By John Thornhill in Moscow

AvtoVAZ, the Russian manufacturer of Lada cars, remains in a weak financial position after recording a net loss of Rbs2,020bn (\$398m) last year, but is slowly improving its productivity and expanding its production.

The carmaker, which was formerly run by Mr Vladimir Kadannikov, the first deputy prime minister in charge of the economy, experienced severe cash flow difficulties last year and still owes Rbs2,000bn, mainly in back taxes.

But AvtoVAZ officials said they had successfully eliminated wage arrears among the company's 110,000 employees at its home town of Togliatti in central Russia. Last year, the cash flow problems were so severe that many workers did not receive their wages for several months.

AvtoVAZ increased its output last year by 18 per cent to 616,144 vehicles, of which it exported 174,000, mainly to Europe and south America. But the company plans to cut its exports to 110,000 this year, claiming that the relative strength of the rouble has made its exports unprofitable.

Like many Russian enterprises built under the Soviet planned economy, AvtoVAZ appears to be heavily overstuffed but has been reluctant to cut its cost base.

Its comparatively high labour costs and ageing models have meant its cars have become increasingly uncompetitive with foreign imports. Despite high import tariffs, about 400,000 foreign cars were sold in Russia last year, according to the Ministry of Economics.

Seven of the 10 models currently manufactured by AvtoVAZ were designed in the 1970s and only three have been developed since 1985.

The company is pinning high hopes on its new Vaz-2110 model and plans to manufacture 16,200 this year. But AvtoVAZ would appear to need a large injection of fresh capital to manufacture the car on a mass scale, and has been unable to conclude any sizeable joint venture with a foreign partner.

AvtoVAZ said its pre-tax profits amounted to Rbs2,210bn last year, compared with a Rbs3.1bn loss in 1994. But the company did not release sales figures and does not intend to pay a dividend.

This announcement appears in a matter of record only

# netia

NETIA TELEKOM SA  
Warsaw, Poland

USD 180,000,000

10 year project finance facility for construction of a \$50,000 fixed line telephone network in the Republic of Poland

JOINT ARRANGERS: European Bank for Reconstruction and Development, ABN AMRO Bank N.V.

LEADER OF RECORD: European Bank for Reconstruction and Development

SENIOR LEAD MANAGER: ABN AMRO Bank N.V.

LEAD MANAGERS: Bank Austria, Bayerische Vereinsbank AG, Creditanstalt-Bankverein, Crédit Lyonnais, De Nationale Investeringsbank N.V., Nordbanken, Svenska Handelsbanken AB (publ)

MANAGERS: Raiffeisen Zentralbank Österreich AG, Die Erste Österreichische Spar-Casse Bank AG, Merita Bank Ltd

PARALLEL LEADER: Nordic Investment Bank

AGENT: ABN AMRO Bank N.V.

ABN-AMRO Bank

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**LEGAL NOTICES**

In the High Court of Justice No 981715 of 1996  
Chancery Division  
Companies Court

IN THE MATTER OF PENNA PLC and

IN THE MATTER OF THE COMPANIES ACT 1985

NOTICE IS HEREBY GIVEN THAT the Order of the High Court of Justice (Chancery Division) dated 26th June 1996 confirming the reduction of the capital of the above-named Company from £500,000 to £225,000.00 and the Minutes approved by the Court showing with respect to the capital of the Company as altered the several particulars required by the above-mentioned Act were registered by the Registrar of Companies on 6th June 1996.

Dated this 26th day of June 1996  
LAWRENCE GRAMHAM  
190 Strand  
London WC2R 1LN  
Solicitors for the above-named Company  
Tel: 0171 379 0001  
Ref: ANF

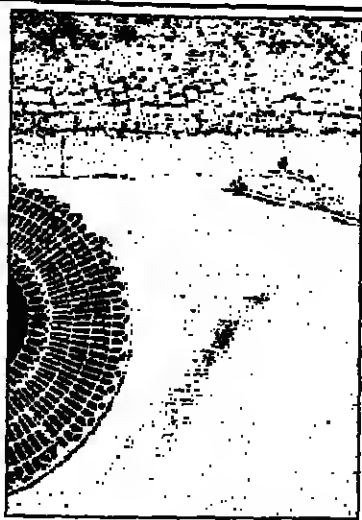
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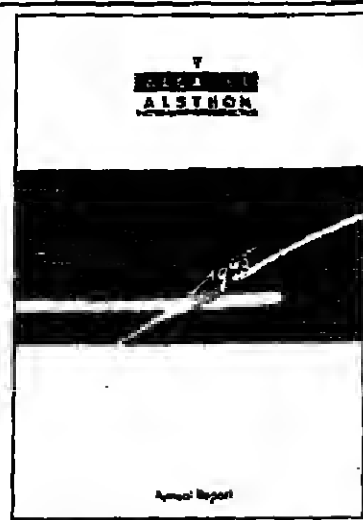


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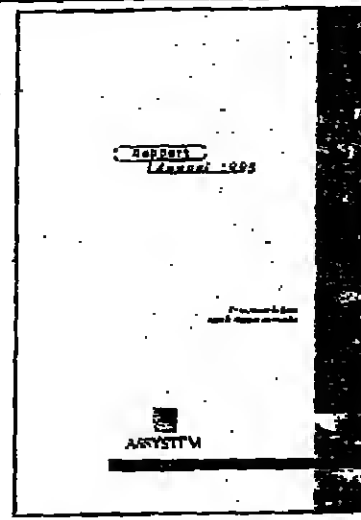
## AEROSPATIALE

In 1995, Aerospace continued to improve its financial performance within a market characterised by hypercompetition and a weak 126 dollar. Aerospace booked orders worth 2.3 billion francs, marking a strong recovery from the total of FF2.0 billion in 1994. With the dollar at FF136, versus FF130 in 1994, Aerospace posted total sales of FF49.23 billion. Amongst a comparable structure and dollar rate would have increased by 1.7%. From success on continuing operations, including minority interests, increased from FF25 billion in 1994 to FF23 billion in 1995, despite the weak dollar, which "cost" the company FF270 million. Aerospace posted a net loss of FF91 million for the year, including a charge of FF1.5 billion to cover the cost of a restructuring plan designed to ensure profitability with the dollar remaining at five francs. The company once again reduced its net debt by FF1.1 billion.



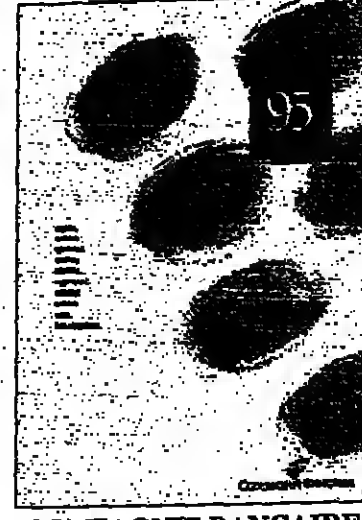
## ALCATEL ALSTHOM

Alcatel Alsthom is one of the world's leading providers of high technology systems and equipment for telecommunications, power and transportation. Each of the Group's business segments ranks among the very best in its field. Its products are key to the economic development of countries around the world. The Alcatel Alsthom share is listed on the Paris Bourse, London's SEAQ, as an ADR on the New York Stock Exchange, as well as on stock exchanges in Tokyo and Europe's major financial centers. With 1995 sales of FF 160.4 billion and 191,800 employees, Alcatel Alsthom operates in over 130 countries.



## ASSYSTEM

ASSYSTEM specialises in providing consultancy services to industry and public sector in order to operate the most cost effectively of their resources, largely located on the making and transport of industrial installations. The ASSYSTEM Group has released an extensive portfolio, including industrial project study and design phases, and construction, to assist in the operation of production units. ASSYSTEM, which originally functioned as a public enterprise in order to provide its services to the steel industry, and such sectors as services and power, automation, instrumentation, chemicals and pharmaceuticals, etc. The ASSYSTEM Group's sales amount to FF 1,044 billion and its net earnings to FF 143 million. ASSYSTEM's shares have been listed on the national securities market, the "Second Marché", of the Paris Stock Exchange since June 9, 1995.

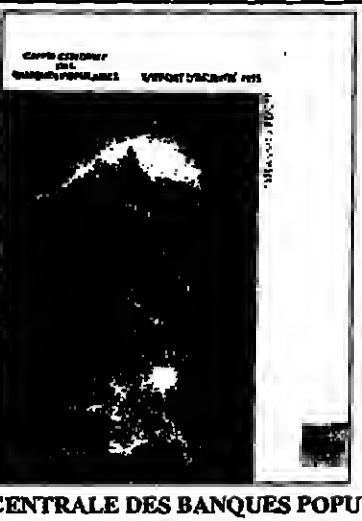


## COMPAGNIE BANCAIRE

One of the leading European banking groups of companies specialising in providing financial services to individuals and institutions. Compagnie Bancaire provides company co-ordinated strategic planning. It is also responsible for funding the Group's lending activities.

**1995 Financial Highlights**

Total loans managed: FF 202.3 billion (US\$ 41.5 billion)  
 FF 81.6 billion (US\$ 16.7 billion)  
 Savings bank under management  
 Consolidated net profit: FF 1.776 billion (US\$ 340 million)  
 - including minority interest  
 FF 443 million (US\$ 125 million)  
 - after minority interests



Caisses Centrales des Banques Populaires is the central banking, financial and technical body of the French Banques Populaires group. It is also a bank in its own right, and is present in all French market sectors. As the Group's financial holding company, it controls and supports a network of specialised subsidiaries. Its customers: Large companies, small and medium-sized enterprises, institutional investors and issuers. Caisses Centrales provides all of these with pertinent financial solutions based on the latest market techniques. Its company philosophy is to develop a long-term partnership with all customers, built on dialogue and mutual confidence, anticipating their requirements and providing the financial solutions they need.

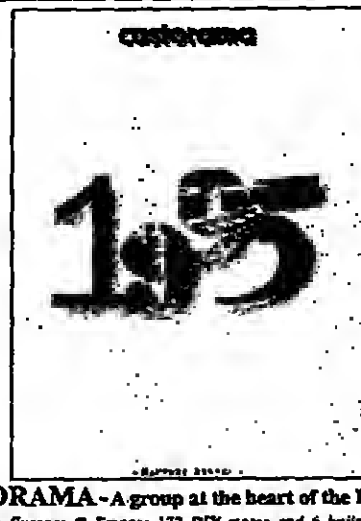


## CARBONE LORRAINE

Carbone Lorraine designs, manufactures and distributes electrical components in three fields (70% of sales): brushes for electric motors, generators, and electrical production. It also develops a business of graphic specialty products thanks to its industrial mastery of material processing. The group posted a turnover of FF 2.6 billion in 1995, an increase of 22% over the year (9% with comparable periods and exchange rate).

1995 showed exceptional management of assets. The year was marked by decisive moves for the group's future:

- the change in the capital structure and the privatisation;
- the change in size, as a consequence of the acquisition of UGMAG (generators segment), and an increase in capital stock.



## CASTORAMA

CASTORAMA - A group at the heart of the DIY market (34 stores in Europe): 122 DIY stores and 6 builders' merchants

- Italy: 3 Castorama stores • Germany: 6 Castorama stores • Belgium: 1 Castorama store

Our achievements in 1995: Sales: FF 16.4bn, up 10%  
 Adjusted net income: FF 546m, up 15%

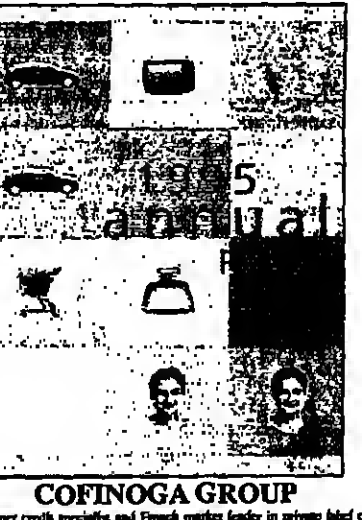
The outlook for 1996: Castorama expects its sales to reach FF17bn this year. We will pursue our policy of steady expansion, strengthening our position in Europe with budgeted investments of FF1bn.

For more information please contact: Investor Relations - Castorama  
 59175 TEMPLEMARS, FRANCE - Telephone (33) 20.87.75.11



## CLUB MEDITERRANEE

Club Méditerranée, the world's leading vacation village operator, is unique among companies in the tourism sector. With an international shareholder base and facilities on five continents serving 1.4 million customers from around the world, Club Med is a global enterprise that generates sales of FF17.3 billion. The Club Med is still identified with the "Village" - an original holiday concept. A staff of 25,000, composed of resort professionals - whom we call "Centaurs Organismes" or C.O.s - and service employees, are Club Med's exceptional locations. Through the C.O.s, Club Med spreads its values to more than 100 villages, values that have ensured the company's success for more than 40 years.



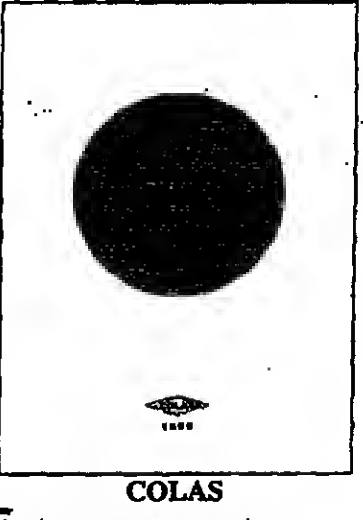
## COFINOGA GROUP

COFINOGA, consumer credit specialist in private bank cards, insurance products by 30% in each of its main areas of business: cards, personal loans and business credit. Financial results at December 31st, 1995 in French francs

- Total loans under management: 146 billion francs
- 17.1 billion francs (+18.2%)
- 1,281 million francs (+17.7%)
- 715 million francs
- Net earnings: 4 million francs
- 1,700 employees

Key facts in 1995

- Consolidation of positions in distribution: around 700,000 private bank cards
- Development of the POINTS CIEL customer loyalty programme
- Creation of partnerships to increase sales and savings



## COLAS

Leading Road Contractor

Publication of the 1995 financial statements

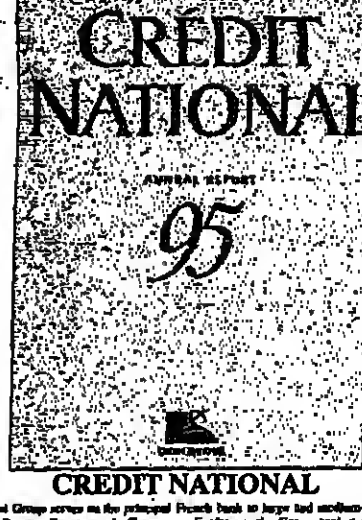
- a turnover increase of 10% to 11.4 billion French francs
- continued international expansion, involving investment of 7.7 billion French francs, 46% accounted for by the acquisition of six subsidiaries in Germany and China Ltd.
- an improvement in net income, 17% higher at 694 million French francs, and cash flow available from operations (1,688 million French francs)

The early start of the 1995 financial year has seen the completion of the program in respect of Colas' expansion in Europe with Germany and Ireland, the Group now undertaking signs in the Colas network to almost 170 countries. In France, after a period of slight dip in early months, its international business, the first that is currently profitable, shows an upturn in activity. The contract portfolio remains robust with the works (1,495 in French francs, 1.2% in Europe, 4% in Africa, 10% in Asia, and 7% in French overseas departments and territories) in a strong start at the end of the Colas Group as it continues to expand overseas in all the continents.



## CREDIT LOCAL DE FRANCE

Since its creation, the French leader in local development financing, Crédit local de France has reported regular growth in business and income. This growth is confirmed by the company's international development in Great Britain, Spain, Austria, Germany, Sweden and the United States. In 1996, Crédit local de France and Crédit communal de Belgique began talks to pool activities. The goal is to form a major European group specialised in the financing of local public service facilities. With equity of more than FF30 billion and a BIS ratio of almost 20%, Crédit local de France has been rated AAA/AA+ by Standard & Poor's, Moody's and IBCA. Net income, group share, totalled FF1,480 million in 1995.



## CREDIT NATIONAL

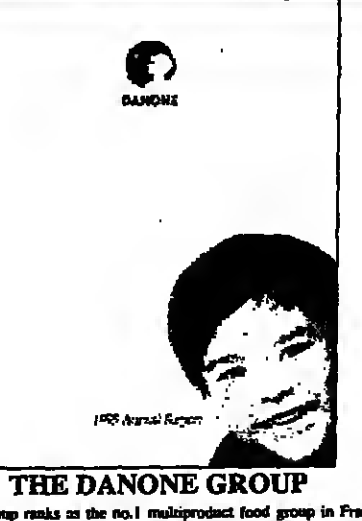
The CNAF National Group serves as the principal French bank to large and sophisticated companies, in taking control of Banque Paribas de Commerce Extérieur, the Group took a decisive step in its development, to secure a major force in the French banking sector. With a number of close, robust and long term credit links in France and abroad, Crédit National covers all areas of capital investment and is among the top 10 contributors to financing UICIT.

Key financial figures of the new integrated group (31/12/1995)

(in billions of francs)

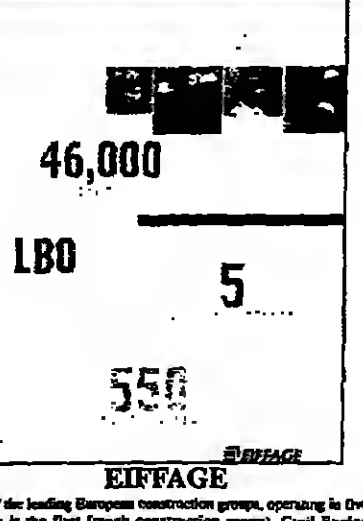
- Total income: 18
- Net income: 2.5
- Total assets under management: 275
- Total assets under management: 275
- Total assets under management: 275

The CNAF National Annual Report includes a specific panel on the merger with BICED.



## THE DANONE GROUP

The DANONE group ranks as the no.1 multiproduct food group in France, no.3 in Europe and no.7 in the world. The group is no.1 in the world in fresh dairy products (Danone) and biscuits (Lu, Bette, Jacobs...) and no.2 in mineral waters (Evian, Volvic...). In Europe, the DANONE group ranks as the leader in fresh dairy products, biscuits, juices and confectionery (Lamona, Mafite, Lora & Perroni...) and 2nd in mineral water, pasta (Passani, Agnelli), beer (Kronenbourg) and packaging in glass containers. The group has based its development on an innovation policy and internationalisation of its activities in Asia, Oceania, Central Europe and Latin America. The DANONE group performed in 1995 a turnover of 79,450 MF and a net profit of 2,133 MF.



## EIFAGE

EIFAGE is one of the leading European construction groups, operating in five core sectors: Building (EIFAGE in the first French construction group), Civil Engineering, Road Construction (recently rebranded in 1995), Electricity Installation and Services. Its activities are carried out through branches which are themselves highly decentralised and operate through many subsidiaries. Approximately 80% of the group's employees are shareholders of EIFAGE, which is LBO owned in 1992. In addition to its particularly dense network of operating companies in France, EIFAGE is also present in several European countries and is currently strengthening its export activities, with ongoing projects in Turkey, Egypt, Nigeria and south-east Asia where the group carries on its development strategy, notably in Indonesia, Thailand and China.



## EMC GROUP

EMC is an agro-chemical group. Its three main activities are:

- chemicals, with organic, inorganic and fine chemical speciality products
- animal feed and health
- pest and fertilising speciality products.

Industry of environment and hazardous industrial waste treatment complete the Group's activities.

Consolidated 1995 Sales: 16.8 billion of French francs.

Chairman of the Executive Board: Bernard Fauché

Main subsidiaries: Teanardier Chemie, Sanders, TREDI, SCFA, MDPA



## ERIDANIA BEGHIN-SAY

Eridania Béghin-Say is an agro-industrial group whose activity spans the range from agricultural raw materials to final products sold on supermarket shelves. In all its businesses, Eridania Béghin-Say holds leadership positions which place it among the major players in the world's food industry.

Thanks to the systematic research of new industrial outlets for agricultural products and to the permanent development of quality, Eridania Béghin-Say transforms the earth's bounty into life's progress. In 1995, Eridania Béghin-Say boasted consolidated turnover of approximately FF 51 billion, with staff totalling 19,400 people, in 24 different countries.

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COMPANIES AND FINANCE: THE AMERICAS

São Paulo sells road concession for R\$1.85bn

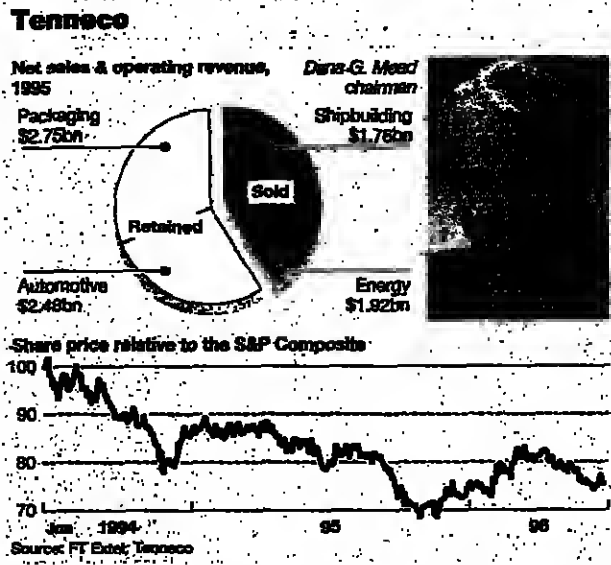
By Jonathan Wheatley in São Paulo

São Paulo, Brazil's most industrialised state, has begun an ambitious privatisation programme with the sale, for R\$1.85bn (US\$1.845bn), of a 20-year concession to operate 250km of highway. The price paid was more than double the value estimated by the state government before the sale. "We expected to sell the concession for R\$850," said Mr Plinio Assmann, transport secretary. "It shows the very high value of this business."

concession period. Servix's income will be derived from tolls at current rates of approximately R\$0.04 per km for passenger vehicles. It estimates income during the concession at R\$5.965bn. Servix must invest a minimum of R\$1.1bn to extend one of the highways and to modernise toll gates and other infrastructure. It is expected to take over management of the highways in September. The sale is the first of 22 concessions in São Paulo due to be handed to private management, covering 5,000km of trunk roads. Governor Mário Covas hopes to sell 70 per cent of them during his term in office, which runs to the end of 1993. Mr Assmann would not put a value on the remaining road sales, although he expected the private sector to invest R\$5bn in modernising and expanding the network during the first concession periods. Income from the concessions would be spent on modernising the state's remaining 25,000km of paved and 200,000km of unpaved roads. He added that the sale raised almost six times the fee paid recently for a 30-year concession to operate 7,000km of railway in eastern Brazil. Despite Brazil's size, road transport is extremely important in the economy; about 90 per cent of freight is carried by road.

Tenneco absorbs shock of change Laurie Morse on the creation of a leader in packaging and car parts

With his announcement last Wednesday that Tenneco would divest its energy and natural gas businesses through merging them with El Paso Energy, Mr Dana Mead, Tenneco's chairman, completed a five-year corporate transformation that few executives would have attempted. By the end of this year, Mr Mead and his management team expect to have spun off or sold four of Tenneco's six disparate businesses, knocked out the "conglomerate discount" that for years has left Tenneco's shares undervalued, and positioned the remaining two businesses for global growth of 15 per cent per year. Tenneco will now comprise two businesses - automotive components and packaging - that are leaders within their industries and have strong international prospects. It will produce shock absorbers and exhaust systems for almost every prominent car manufacturer in the world, and will make a range of packaging that includes everything from retail rubbish bags to industrial cardboard boxes. The decision to spin off Tenneco Energy was the most recent in a series of moves that began in 1994 with a public offering of Case, the heavy equipment manufacturer, and included last year's sale of Albright & Wilson, the UK chemicals company. The sale of the energy company was significant beyond the financial details - Tenneco began as Tennessee Gas and Transmission Company in 1943



but those are important. The deal will bring nearly \$4bn in value to Tenneco shareholders, in the form of equity in El Paso Energy and El Paso's assumption of nearly \$3bn of Tenneco's debt and other liabilities. The transaction will give Mr Mead and his management committee a fresh line of credit to use to make strategic acquisitions in the remaining two businesses. Even before the El Paso announcement, the Mead team had transformed Tenneco. In 1991, the year before Mr Mead and his mentor and predecessor, the late Mike Walsh, joined the company, all six Tenneco divisions had falling operating profit; the group's \$6bn debt was 70 per cent of capital and the company

reported a \$750m loss for the year despite \$7bn asset sales. Relentless cost-cutting and an obsession with setting and meeting quality and performance goals, from the shop floor to the boardroom, allowed management to staunch heavy losses at the Case unit, and return it to profitability within two years. The successful four-part public offering of Case that followed convinced Wall Street that Mead had both the determination and the talent to remake Tenneco. By 1995 the turnaround was so successful that Tenneco earned \$723m on sales of \$9bn (1996 revenues are projected at \$10.5bn). Once the El Paso merger is complete and the tax-free spin-off of

Newport News Shipbuilding to shareholders is finished, Tenneco's debt will shrink to 30 per cent of capital. Tenneco management continues to face the challenge of replacing the revenues and income of its former units with higher-yielding businesses. The company's net profit margin reached 7.5 per cent last year as it redeployed income from asset sales. Since the first Case offering in 1994, Tenneco has made \$2.4bn in fresh acquisitions and bought back \$750m of its own stock. Mr Mead has repeatedly said that Tenneco is not contemplating entering new businesses, and will not make acquisitions simply for the sake of redeploying capital. He waited nearly a year after the initial Case sale to purchase Mobil Corp's plastics business for \$1.3bn, a transaction that made Tenneco the fourth-largest packaging company in the world. Analysts say the plastics business will more than replace Case's lost income this year, and will boost Tenneco Packaging's revenues to \$4bn. Tenneco also made 10 smaller packaging buys last year. Similarly, Tenneco last week bought Ohio-based Clevite, a manufacturer of vehicle vibration-control components, for \$300m. The company sees its greatest growth prospects in the automotive business, and last year made buys in Spain (Fonos), the Czech Republic (Ateco), Australia and New Zealand (National Springs), and entered joint-ventures in India and China.

NEWS DIGEST Warner Brothers in joint venture talks

Village Roadshow, the Australian cinema and entertainment group, said yesterday that it was "in active negotiations" to create a joint venture with the US-owned Warner Brothers operations in the UK and Germany. The two companies are already in a joint venture to build 18 new "megaplexes" - each housing about two dozen screens - in Australia over the next three years. They have also been involved in joint venture park operations on Queensland's Gold Coast. Warner operates 135 screens on 15 sites in the UK and has 17 screens in Germany's Ruhr Valley. Village recently raised about A\$318m (US\$171m) through a preference share issue, to accelerate its international expansion plan. The Australian company has already moved into south-east Asia, notably Thailand, Singapore and Malaysia, and has a stated target of increasing earnings by 20 per cent a year. Nikki Tait, Sydney

TransAlta Energy in NZ plan

TransAlta Energy, the Calgary-based power utility, has bought the 51 per cent it did not already own of Capital Energy, the electricity distribution company serving Wellington, New Zealand. The shares were bought from the Wellington municipality for NZ\$30m (US\$11m). TransAlta also plans a NZ\$65m capital injection to retire all Capital's debt. The intention is to merge Capital Energy with EnergyDirect Corporation, another power distributor in the Wellington area in which TransAlta has a 41 per cent stake. The Canadian group would end up with a 63 per cent interest in the combined company, which would be New Zealand's fourth biggest electricity distributor, with 140,000 customers. Bernard Simon, Toronto

3Com disappoints with 37% rise

Shares in 3Com, the fast-growing US computer networking company, dropped 9 per cent yesterday in response to a 37 per cent rise in fourth-quarter earnings. The market had hoped for a sharper increase. Earnings before special charges were \$68m, or 46 cents a share, while sales rose 38 per cent to \$660m. The shares fell 4% to 44% in early trading after non-recurring items - chiefly a \$52m pre-tax charge for the acquisition of technology - fully diluted earnings in the fourth quarter were down from 31 cents a share to 16 cents. For the full year, sales rose 46 per cent to \$2.8bn, while net income before charges was up 43 per cent to \$280m, or \$1.53 a share. After charges, full-year income rose 19 per cent to \$1.01 a share. Sales of systems products, such as hubs and switches, rose 43 per cent to \$788m. Sales of network adapters, such as PC cards, rose 94 per cent to \$268m. Tony Jackson, New York

Dominion Energy in Peru move

Dominion Energy of Richmond, Virginia yesterday moved into power generation in Peru by acquiring a controlling stake in the northern Peruvian electricity generating system, Egenor. Dominion's offer at public auction of \$228.2m for 61 per cent of the shares narrowly defeated the only other bid - of \$223.5m - from Destec, another US independent power producer. Dominion already has a presence in Argentina and in Bolivia. All its Latin American acquisitions have been through privatisations. Dominion is contractually obliged to invest in and expansion of Egenor's 400MW installed capacity - comprising two hydro and six thermal power plants - by at least 100MW in the next 36 months. Egenor, formerly owned by the state-owned group, Electroperu, is currently making profits of about \$5m a month. Sally Bowser, Lima

CapCities/ABC in international revamp

By Raymond Snoddy

Capital Cities/ABC, the US broadcaster, yesterday announced a restructuring of its international interests and their integration with Walt Disney Television International. The move, to be called Disney/ABC International Television, creates a group which combines stakes in broadcasting and production companies with both Disney programme distribution and Disney chan-

nels carried on cable and satellite. Mr Herbert Granath, who is based in New York, will be chairman of the new international business, which follows last year's merger of Disney and CapCities/ABC. Mr Etienne de Villiers, who runs Disney's international operations, will be president of the combined operation and will run the organisation day-to-day from his London headquarters. The new division integrates

the international broadcast, cable and sales activities of CapCities/ABC with the international free and pay television, distribution, production and broadcast organisation of Walt Disney Television International. In particular, the combined group would bring together several of the most important elements in driving forward pay TV systems - movies, sport through ESPN and Eurosport, and the Disney channel. Mr de Villiers has overseen

the successful launch of Disney Channels around the world - most recently in Taiwan, the UK and Australia, with future launches planned in the Middle East and France. CapCities/ABC's interests in Europe include a 50 per cent stake in Tele-München, a Munich-based programme production and distribution group, a 21 per cent stake in Scandinavian Broadcasting System and a 23 per cent holding in RTL-2, the German cable and satellite service.

Razzouk quits as AOL chief after four months

America Online, the leading US online service provider, announced yesterday that Mr William Razzouk had resigned as president and chief operating officer after only four months at the company. Lisa Bransten writes in New York. The company said Mr Razzouk was having difficulty in moving his family to America Online's headquarters near Washington DC from their home in Memphis, Tennessee.

Mr Steve Case, America Online's chairman and chief executive, will take over Mr Razzouk's responsibilities. Shares in the fast-growing company have dropped more than 40 per cent since early May. It is the subject of a Federal Trade Commission inquiry into its trial and cancellation policy and its practice of allowing users to pay through automatic withdrawals from their bank accounts.

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COMPANIES AND FINANCE: ASIA-PACIFIC/MIDDLE EAST

St George bid for Metway in the balance

By Nikki Tait in Sydney

Shares in Metway Bank, the Queensland-based regional bank, slid 9 cents to A\$4.51 yesterday, as analysts decided the chances of the Sydney-based St George Bank succeeding with its A\$810m (US\$640m) bid were diminishing.

George proposals, which would be implemented by a scheme of arrangement. The bidder needs 75 per cent approval from each class of share for the scheme to go ahead.

St George's chances of success have diminished in the past few days as the Queensland state government - which has promoted a rival scheme, involving a merger between Metway and two other financial institutions in the state to

create a regional financial services group - has bought up shares in Metway. Mr Rob Borbidge, the Queensland premier, confirmed yesterday that the government owned a 9.9 per cent interest in Metway.

A further complication is a 25 per cent stake in Metway preference shares held by National Australia Bank, the country's largest bank. NAB, which also has a small stake in St George and has been

Deutsche Telekom may list in Asia

By James Kyng in Singapore

Deutsche Telekom, the state-owned German group, yesterday said it was considering listing its shares on an Asian stock exchange.

NEWS DIGEST

Joint venture plans Israeli Visa card

Competition in Israel's fast-growing credit card market is set to increase following a deal announced yesterday by First International Bank of Israel, a member of the Safra group, and Aurec, an information technology company part-owned by SBC Communications, of the US. A joint venture between the two companies has won a licence to become Israel's second provider of Visa credit card services.

FIBI said that the new company, the first such operation owned by the Safra group, aimed to provide credit card services for the family of Safra banks worldwide. The new Visa company would have an initial financial investment of "dozens of millions of shekels", said the venture's managing director, Mr Yaacov Dior.

Sixty-seven per cent of the shares will be held by FIBI and 33 per cent by Aurec. The company will begin operations in 1997, trying to win over card-holders and businesses signed up with the existing Visa International franchise in Israel. ICC. "Real and very strong competition will enter the market. The whole nature of the credit card industry in Israel will be changed dramatically," FIBI said.

It added that it was "more than possible" that the new venture would produce Israel's first fully-fledged credit cards and provide direct credit to customers. ICC and Aurec, a local licensee of MasterCard International, issue what are essentially charge cards whose entire monthly balance is debited from a bank account. Mr Dior said the new FIBI-Aurec Visa consortium planned to share its profits with card-holders and merchants.

Aurec's ownership is equally divided between the Israeli Kaban group and SBC Communications. The group controls Arutzel Zahav, Israel's largest cable-TV provider; Depel Zahav, a local equivalent of the Yellow Pages business telephone directory; and Amihoc, Israel's largest software group. The credit card market in Israel has an annual turnover of \$10bn. According to a recent survey, 98 per cent of Israeli adults hold a Visa and another 98 per cent carry a MasterCard.

Dickson Concepts acquires Seibu HK, Shenzhen stores

By Louise Lucas in Hong Kong

Dickson Concepts, the Hong Kong based luxury wholesaler and retailer, is to take control of the Seibu department stores in Hong Kong and Shenzhen, in southern China, for HK\$180m (US\$23.3m).

Dickson Concepts received about \$64m (US\$8.4m) from the flotation in April of 49.9 per cent of its Harvey Nichols unit, but Mr Dickson Poon, chairman, noted that even without that windfall the company's net cash position stood at more than HK\$400m.

Under the deal, which is subject to a number of conditions,

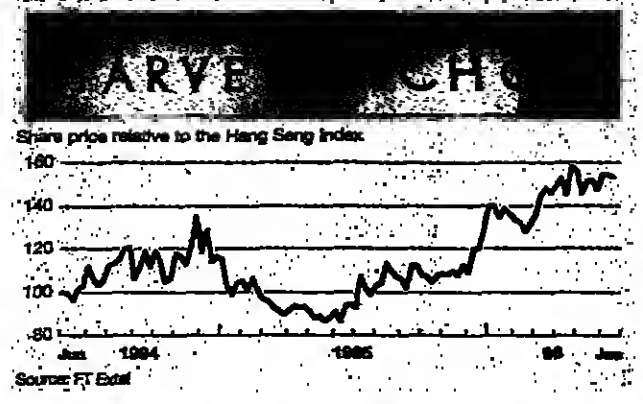
Dickson Concepts will acquire 86 per cent of Hong Kong Seibu Enterprise Company in return for an injection of HK\$180m. The company's operations include a wholly-owned department store in one of Hong Kong's prime shopping malls and a 56 per cent interest in a smaller Seibu store in Shenzhen.

Seibu Department Stores, the Japanese company of which Hong Kong Seibu is a wholly owned subsidiary, is selling out after six years, just as the Hong Kong store is starting to break even. Turnover for the year to February 29 was about HK\$300m; at Shenzhen, turnover

was more than HK\$135m and the business was profitable, according to Mr Poon. However, Seibu said the sale was in line with its policy of localisation - bringing local management skills to its operations around Asia.

In the partnership, Dickson Concepts will be primarily responsible for the management and operations of Hong Kong Seibu, while Seibu Department Stores will grant the exclusive franchise for the use of the trademark as well as offering know-how on business development and expansion. Mr Poon said he expected to be able to achieve a net return

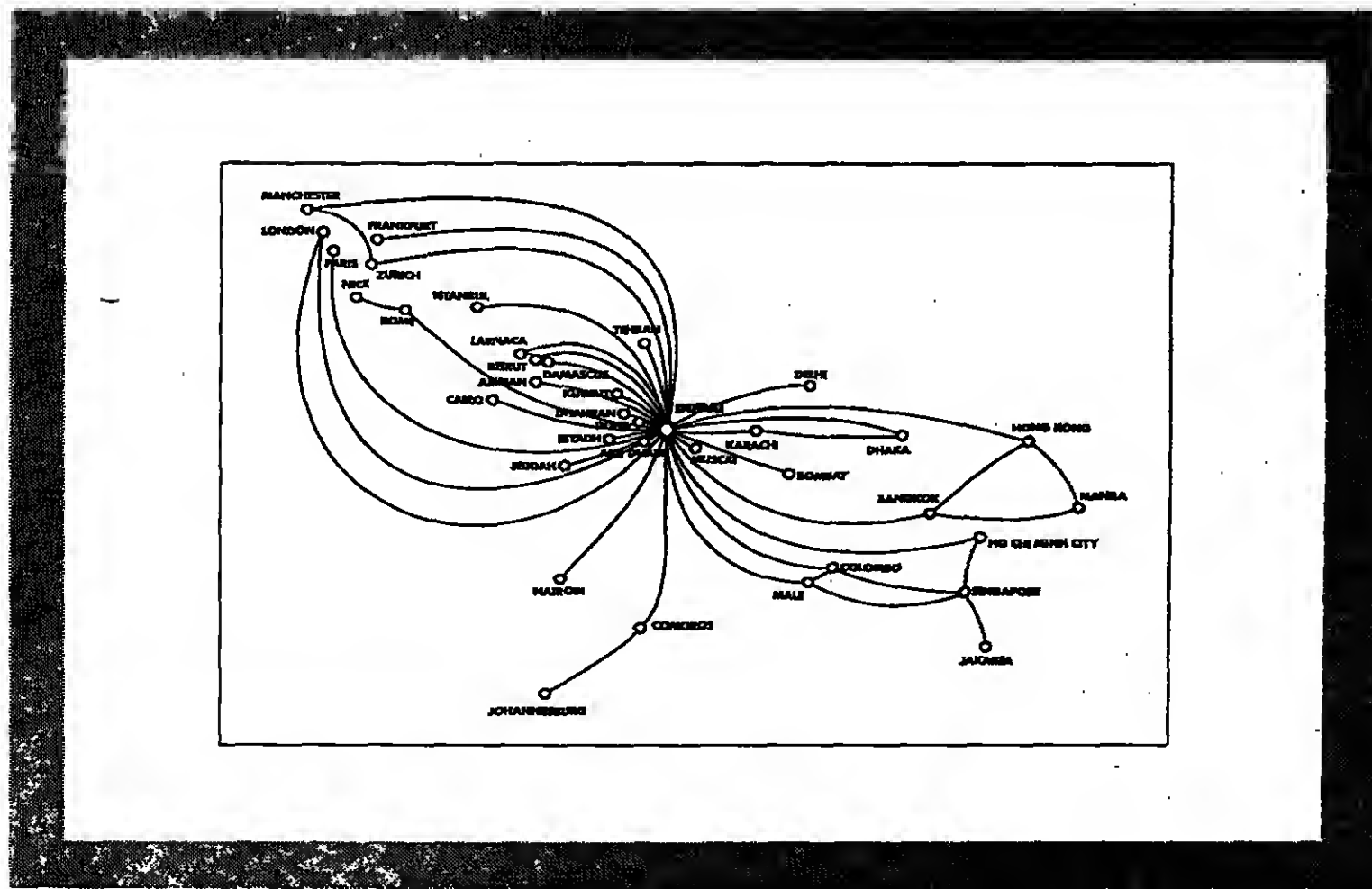
Dickson Concepts



of about 10 per cent out of sales in the next financial year, which he said would mean a profit of HK\$68m after tax - or a return of 68 per cent on equity. Dickson Concepts' investment is split into a

HK\$100m shareholding and HK\$80m shareholder's loan. Dickson Concepts' share price rose 30 HK cents - or 3.47 per cent - to HK\$39.95 yesterday, fuelled by expectations of the acquisition.

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Samsung lifts KorAm Bank stake

Samsung, South Korea's largest business group, said yesterday it had agreed to take over Bank of America's 10 per cent stake in KorAm Bank. After the transaction, Samsung will be the biggest Korean shareholder in the joint venture bank. Samsung's shareholding in the joint-venture bank will rise to 15.79 per cent after the deal. Before Samsung's takeover, Daewoo Group was the biggest Korean shareholder with 9.59 per cent. The Bank of America still maintains the single biggest stake - 19.3 per cent - in the bank. AP-DV, Seoul

Boral power plant to go ahead

Boral, the Australian building materials and energy group, said it had reached final agreements that would allow the building of a A\$175m (US\$138m) co-generation power facility in South Australia to go ahead. The project is a joint venture between Boral and Canadian-based CU Power International, part of the Canadian Utilities/ATCO group of companies.

The 180MW co-generation plant will be largest such private sector project in Australia, drawing on natural gas from South Australia's Cooper Basin, where Boral has interests, and will provide a steam supply to Penrice Soda Products, for use in the production of soda ash. It will also generate an independent electricity supply for ETSA Corporation, the state government-owned electricity utility. Construction is due to start in October and the plant should be fully operational by July 1998. Nikki Tait, Sydney

BRL Hardy buys NZ holding

BRL Hardy, Australia's second largest wine producer, has bought a one-third stake in New Zealand's National Liquor Distributors for an undisclosed sum. A similar stake will be acquired by Nobile Vintners, the New Zealand-based wine group which is best-known for its "White Cloud" label and which already has a distribution arrangement with Hardy in Australia. Mr Stephen Miller, Hardy's managing director, said the stake would provide a "long-term, stable distribution arrangement". Nikki Tait

HIH Winterthur in Argentine deal

HIH Winterthur, the listed Australian general insurer, said yesterday that it had set up a joint venture with Argentina's Interamericana group, to provide workers' compensation services in Argentina. The move followed the Argentine government's decision to make workers' compensation compulsory from next month. It said it expected the joint venture - HIH Interamericana ART - to generate about A\$20m (US\$16m) of premium income this year. Nikki Tait

Thai mobile phone venture draws strong protests

By Ted Bardache in Bangkok

Thailand's booming mobile telephony market, controlled by two companies, is set to have a third competitor - with strong links to one of the existing operators.

International Engineering (IEC), a distributor of telecommunications equipment controlled by media tycoon Mr Sondhi Limthongkul, and Total Access Communications, which already runs both analogue and digital mobile phone systems, have set up a company - Wireless Communications Service - to offer digital mobile phone services from June 1997.

Wireless Communications will operate its service on portions of the 1,800-megahertz bandwidth allocated to Total Access, which the latter does not use. The subcontracting out of this bandwidth to a friendly affiliate - IEC is already a service provider and marketer for Total Access, which holds a 6.3 per cent stake in IEC - is seen by analysts as a way for Total Access to thwart potential competition in the highly profitable mobile phone industry.

The move is being undertaken with the agreement of the state-owned Communications Authority of Thailand, which will receive between 25 per cent and 30 per cent of the revenue of the new company, including a minimum annual guarantee of \$144m. It will also receive a 1.1 per cent equity stake in the new company. IEC will hold 53.9 per cent of Wireless Communications and

Total Access will hold 45 per cent, although IEC will underwrite 70 per cent of the new company's start-up costs.

Advanced Information Services, Thailand's other mobile telephone operator, whose shares fell more than 6 per cent on Friday, and the Thai media have protested against the deal, charging that available bandwidth should be used to increase competition in the industry, not to set up affiliate companies.

Mr Suradet Mukyangkoon, IEC president, said: "Total Access is committed not to interfere in the new company's operations, so as to create free competition."

Nevertheless, Total Access and Wireless Communications have agreed to form a roaming arrangement, which will allow subscribers to connect between the two networks.

Total Access will also give the new company an initial group of subscribers, thus allowing Wireless Communications to generate revenue from its first day of operations.

Wireless Communications will pay Total Access \$150m for these two privileges, an amount Mr Suradet conceded "may not be worth enough for Total Access".

Yet keeping competitors out is vital, analysts said. "Total Access has often been criticised for having far too wide a bandwidth. The agreement with IEC is intended to reallocate some of its frequencies to an ally, before a future government takes them back and gives them to a real competitor," said Seazoo Securities.

Indep calls

By John Murray in Dublin

Independent... Dublin... has received... since 1991... Dublin... Mr O'Sullivan... drawn on the... for the... out further... is the main... bank to the... the annual... independent... to encourage... Australian... pers followed... eral have... share ownership... an option of... ing in W... New Zealand... O'Sullivan... not be... electronic... He is... 8.5m... about 21... about a... industry...

HIGH WATER IN ARGENTINE DEAL

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THAI MOBILE PHONE VENTURE DRAWS STRONG PROTESTS

By Ted Bardache in Bangkok

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## Pru to float M&G with £1.5bn tag

By Motoko Rich and Ralph Adams

Prudential, the UK's largest life assurance group, has joined the accelerating process of consolidation in the UK financial services industry, announcing it is to float its Mercantile & General reinsurance subsidiary and expand its presence in life insurance and retail banking.

The group aims to float M&G by a global equity offering in the autumn.

Analysts said the flotation valuation, which some have estimated at up to £1.5bn (£2.29bn) would be difficult to fix because this would be the first reinsurance company in list in London.

For this reason, the group is expected to sell only about half of the shares.

"We have decided to concentrate on the retail financial services sector and retained fund management and not be in the wholesale end of the business," said Mr Peter Davis, chief executive.

The flotation would mark the group's first strategic move since Mr Davis became chief executive in May 1995.

Mr Davis and his board decided M&G was a non-core subsidiary offering few synergies with its life insurance and fund management businesses.

Pru shares rose 4p to 409p on the news. Analysts said the decision to spin off the reinsurance subsidiary made sense.

"M&G has been recognised as non-core for several years," said Mr David Nisbet, analyst at NatWest Securities.

The flotation, expected in the autumn, opens the way for the group to make acquisitions in the UK and expand overseas.

The Pru's move follows other developments in the UK insurance industry, including the merger between Sun Alliance and Royal Insurance, the flotation of Sun Life & Provincial,

part of French insurer UAP and the acquisition of Clerical Medical, the life insurer, by Halifax Building Society. The Pru has made no secret of its desire to buy another life insurance company and a building society in the UK.

Mr Davis said he foresaw further consolidation and polarisation in the UK market, with a handful of large groups dominating the industry in the next century.

Over the past few months the Pru's name has been linked with a number of potential targets in retail finance, including the Woolwich and Alliance & Leicester building societies and Friends Provident, the mutual life insurer.

The Pru also plans to expand into mortgage lending and deposit taking in a bid to retain some of the funds released when its life policies mature.

Although the funds raised through the flotation of M&G will provide the Pru with financial ammunition for its expansion plans, analysts did not rule out the possibility of a future rights issue.

"They have scope to raise about £500m of debt and if they get about £800m from the M&G deal they could also gear up some amount of debt on the back of that," said Mr Nisbet.

"But the balance will have to come out of new equity so it seems to me a rights issue could still be on the cards."

M&G is likely to seek listings in New York and other markets as well as in London.

M&G was hit badly in the early 1990s by a series of catastrophes and industrial disease claims. The general reinsurance activities reported a £95m operating loss in 1993 but, after the appointment of a new management team, made a £63m profit last year. Prudential has failed to secure a trade sale, despite approaches from possible bidders in recent years.

## Vocalis to float at £30.5m

By Jane Martinson

Vocalis Group of Cambridge, which integrates speech recognition technology into telecommunications systems, is to place 5.3m shares at 55p, a price which gives further evidence of the market's appetite for new technology issues.

The placing values the company at £29.5m (£46.66m), £5m more than predicted last week. Albert E Sharp, brokers, said the flotation had been substantially oversubscribed.

Most of the £4.4m net raised from the placing of just under 20 per cent of the shares is to be spent on product development and marketing.

Mr Jeremy Peckham, managing director, said the workforce would rise from 80 to 85, with most being taken on in sales and marketing. An office is also being set up in California at the end of this year. "We feel that the time has come to put the proven products out into the market place," he said.

Typical are an automated receptionist and a voice-activated mobile telephone.

Last month, the company signed a deal worth £500,000 with Ericsson, the Swedish telecommunications group, to supply Telekom Malaysia with equipment. Mr Peckham said the company was in discussions on further deals.

Vocalis was formed three



Jeremy Peckham: "Time to put proven products into the market"

years ago in a management buy-out from Logica, the computing services group. The 13 buy-out members retain a 26 per cent stake.

Heavy investment in the year to March 31 led to a

£1.21m loss on sales of £536,000. In the first two months of the current year the company achieved sales of £233,000. Mr Peckham expects similar levels of investment to affect profits this year.

## Wickes shares suspended

By Andrew Taylor and William Lewis

The chairman of Wickes, the troubled DIY retailer, came under a storm of criticism from institutional investors yesterday after the group revealed that serious accounting problems probably resulted in 1995 profits and shareholders funds being overstated.

The group's shares were suspended yesterday morning after plunging by 40p to 69p. Wickes said it was not possible to quantify the "magnitude of these overstatements" and would only say that its problems related to the timing of recognition of profit from supplier contributions.

These are understood to involve cash discounts, known as over-riders, paid by suppliers to large DIY stores and builders merchants in return for big volume orders.

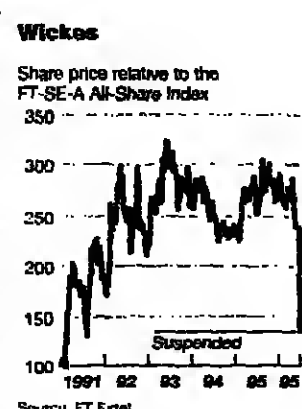
It is thought that some of the benefits of over-riders may have been included by Wickes in its annual profits before items had been sold. The company warned that earlier years profits may also have been over-stated.

A board meeting was still continuing at Wickes last night.

### LEX COMMENT

## Wickes

Is Wickes, the Do-It-Yourself retailer, being held together by a couple of nails and a bit of sticky tape? Yesterday's 37 per cent drop in the share price before it was suspended suggests the market thinks so. "Serious accounting problems" are enough to churn the most seasoned investor's stomach. Like many businesses, Wickes has been in the habit of squeezing discounts out of its suppliers in return for promising to sell a certain volume of their products. Like most retailers, it was



paid some of these discounts upfront in cash, to help defray extra marketing costs. The problem in this case, it appears, is that Wickes booked these discounts as profits, only to find later that it failed to sell the promised volume of goods and therefore was not entitled to that profit.

As the DIY market's pile-'em-high, sell-'em-cheap operator, Wickes has won plaudits from the City for grabbing market share by opening new stores and undercutting rivals. If it now turns out that this rapid expansion was based partly on fake profits, it raises questions over the whole strategy.

It also raises serious corporate governance issues. Wickes is run by Mr Henry Sweetbaum, who has combined the roles of chairman and chief executive since he rescued the business from near-bankruptcy in 1982. Last year the board paid itself £3.6m - more than a tenth of underlying profits. Mr Sweetbaum received £1.2m including a £750,000 bonus based on share price performance which, it now emerges, was built on inflated profits. At the very least, Mr Sweetbaum should split his roles and repay his bonus.

## Independent News calls for I£106m

By John Murray Brown in Dublin

Independent Newspapers, the Dublin-based media group controlled by Mr Tony O'Reilly, is raising I£106m (£66.7m) in a rights issue to strengthen its balance sheet.

The 1 for 3 issue, priced at 45p, is the first time the group has resorted to new equity since 1983. Its shares closed in Dublin at 500p, down 15p.

Mr O'Reilly refused to be drawn on the precise reasons for the issue, but did not rule out further acquisitions. "This is the right time for us to come back to the market," he told the annual meeting in Dublin.

Independent has an opportunity to increase its stake in the Australian Provincial Newspapers, following a change in federal laws restricting foreign share ownership. There is also an option to increase the holding in Wilson & Horton the New Zealand publisher. Mr O'Reilly hinted that he would not be expanding the group's electronic media interests.

He is taking up his rights on 8.5m shares, representing about 21 per cent of the company, at a cost of I£22.9m. The balance is being underwritten

by Bankers Trust International, and Davy, the Dublin stockbrokers.

The issue will reduce the company's gearing to 14 per cent. Before the announcement it was projected at 50 per cent by the year end, or 110 per cent if the value attributed to the titles is stripped out.

Asked about losses at The Independent newspaper, published by Newspaper Publishing, in which the Irish company has a stake, Mr O'Reilly said it was "one price increase and one newsprint price decrease away from profitability".

Brokers broadly welcomed the rights announcement. Although priced at about 12 per cent discount to the market, analysts say it is not a giveaway. Indeed it would seem to take full advantage of recent gains in the share price.

Mr O'Reilly's pledge to take up his rights in full will also underpin any wavering shareholders.

The proceeds will help the company reduce debt, after some cashflow constraints brought on by the pace of acquisitions. Mr O'Reilly was being unusually tongue-tied about acquisitions plans.

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COMPANY NEWS: UK

### Halma in 20th year of profits increase

By Ross Terman

The crackdown on leaky pipes at Britain's water companies helped Halma, the hazard detection and measurement equipment maker, maintain its 20-year record of profit increases.

Pre-tax profits climbed 15 per cent to £33.6m in the year to March 30. Mr David Barber, chairman and chief executive, said growth in profits and in sales, up 13 per cent to £174m, was achieved with little help from acquisitions.

Mr Barber said three business areas, water leak detection, fire detection and gas detection accounted for half of the group profit increase. The biggest improvement was in water leak detection. Halma reorganised its activities into a single company, Palmer Environmental, during the first half.

During the second six months, profits recovered strongly after Mr Ian Byatt, the water regulator, ordered Britain's water companies to reduce the volumes lost between reservoir and tap. One water company ordered 160 mms for a total of £1m.

Apollo, the company's fire detection subsidiary, also made a strong showing. With more than 50 per cent of the UK market for wired systems, Apollo claims to rank third in the world, after American and Japanese rivals. It is stepping up its drive to win sales overseas.

Earnings per share increased by 15 per cent, in line with profits. The board is recommending a final dividend of 1.566p a share, making 2.564p, up 20 per cent.

With £19m of net cash at the year end, Mr Barber said Halma is seeking bolt-on acquisitions to reinforce its existing businesses. These are being sought in Britain, Europe and the US.

Since the year-end, Halma has already made three acquisitions. The most important was the £7.1m purchase of Keeler, a manufacturer of ophthalmic instruments, from Dollond & Aitchison in May.

### Psion may buy Amstrad

By Paul Taylor

Psion, the handheld computer maker, plans to pay £234m in shares for Amstrad, the computer and digital telephone group run by Mr Alan Sugar.

The two companies, which signed a memorandum of understanding a few weeks ago, confirmed yesterday they were in discussions that could lead to a Psion offer for Amstrad.

They said a bid, which is likely to be tabled in three or four weeks following the completion of due diligence, would be at a price of not less than 200p per Amstrad share payable in Psion shares, plus a further possible payment contingent on the outcome of litigation.

A merger of the two companies would enable Psion to incorporate Amstrad's digital cellular telephone technology in the next generation of its handheld computers to create a range of wireless mobile devices for business and other users.

Mr David Potter, Psion's founder and chairman who has built the UK-based company into the worldwide leader in the handheld PC market, believes the next generation of handheld machines will combine the functions of a computer and mobile telephone.

These pocket-sized machines are expected to provide a wide range of voice and data services to their owners, includ-



Alan Sugar of Amstrad: wants to spend more time doing deals

ing access to the Internet and electronic mail.

Psion's shares which have been buoyed in recent months by the success of its Psion Series 3 handheld computers and strong results, closed down 25p a 350p while Amstrad's shares gained 36p to 184p.

The merger talks, apparently instigated by Amstrad a couple of months ago, come in the wake of Mr Sugar's attempts to reorganise the company and focus it on high-growth tech-

### Pearson puts local papers up for sale

By David Slackwell

Pearson, the information, publishing and entertainment group which owns the Financial Times, yesterday slapped a for sale notice on Westminster Press, its UK regional newspaper business.

No price was given, but recent deals to the sector suggest the business could fetch more than £300m. Shares in the group, which until recently denied Westminster Press was for sale, rose 4p to 64p on the news.

Mr John Makinson, Pearson finance director, described the sale as "a sensible way to free resources" in order to achieve better positions in the group's chosen international markets of information, education and entertainment.

City analysts said Westminster Press was probably the most logical disposal Pearson could make. It was non-core, and in spite of its profitability the regional newspaper industry was in long term decline.

"It's positive," said one analyst. "Pearson is finally doing something, but there is a long way to go before they win back the confidence of the City."

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26 June 1996

#### Offer by Baring Brothers International Limited on behalf of Westminster Health Care Holdings PLC for Goldsbrough Healthcare PLC

Baring Brothers International Limited ("Barings") announces that, by means of an offer document dated 25 June 1996 (the "Offer Document") and by means of this advertisement, Barings is making a final offer (the "Offer") on behalf of Westminster Health Care Holdings PLC ("Westminster") to acquire all of the issued shares in Goldsbrough Healthcare PLC ("Goldsbrough") and any further such shares which are successively issued or issued prior to the date on which the Offer closes (for each earlier date, see below) on or before 16 July 1996, as Westminster may determine ("Goldsbrough Shares"). Terms defined in the Offer Document have the same meaning in this advertisement.

A person who validly accepts the Offer (but does not elect for the Cash Alternative described below) will receive 54 new ordinary shares of 20p each in Westminster ("New Westminster Shares") for every 100 Goldsbrough Shares. On the basis set out in the Offer Document, the Offer values each Goldsbrough Share at 172p and the entire issued share capital of Goldsbrough at approximately £73.4 million. A person who validly accepts the Offer may elect to receive cash instead of all or any of the New Westminster Shares to which he or she would otherwise be entitled under the Offer (the "Cash Alternative"). Under the Cash Alternative, Westminster will procure that Barings pays or causes to be paid to each person who validly accepts the Offer and elects for the Cash Alternative a cash payment of an amount of 200p, free of capital tax, in respect of each New Westminster Share to which such person would otherwise be entitled under the Offer (up to a maximum of £23,664,702 New Westminster Shares). This is equivalent to 125.6p in cash for each Goldsbrough Share.

The full terms and conditions of the Offer and the Cash Alternative are set out in the Offer Document. The Offer is open for acceptance until 1.00 p.m. on 16 July 1996. The Offer will (save as provided below) lapse unless it becomes or is declared unconditional on that date. The Offer is final and will not be renewed or extended beyond 1.00 p.m. on 16 July 1996, unless it is unconditional as to acceptance by that date, except that the right is reserved to revise and/or increase and/or extend the Offer if a competitive situation (as determined by the Panel) arises or otherwise with the consent of the Panel. If the Offer becomes unconditional as to acceptance, it will remain open for acceptance for not less than 14 days from the date on which it would otherwise have lapsed. The Cash Alternative will remain open until 1.00 p.m. on 16 July 1996. If the Offer is then unconditional as to acceptance, the Cash Alternative will not be extended after that time.

The New Westminster Shares issued pursuant to the Offer will be issued as fully paid and will rank pari passu in all respects with existing Westminster Shares, including the right to receive all dividends and other distributions declared, made or paid thereon, save that they will not rank for the final dividend in respect of the year ended 31 May 1996.

The Offer is not being made, directly or indirectly, to or into the United States, Canada or Australia and neither the Offer Document nor the Form of Acceptance relating to the Offer are being distributed or sent to, into or from the United States (whether by use of the mails or by any means or instrumentality of interstate or foreign commerce), Canada or Australia, and the Offer cannot be accepted by any such use, means or instrumentality or from within the United States, Canada or Australia. The New Westminster Shares have not been, and will not be, registered under the United States Securities Act of 1933 (as amended) nor under the securities laws of any state in the United States and the relevant clearance has not been, and will not be, obtained from the securities commission of any province of Canada. No prospectus in relation to the New Westminster Shares has been, or will be, lodged with the Australian Securities Commission. Accordingly, unless such Act or laws is available, New Westminster Shares may not be offered, sold, resold or otherwise disposed of, directly or indirectly, in or into the United States, Canada or Australia.

Acceptances of the Offer should be despatched as soon as possible and in any event no later than 1.00 p.m. on 16 July 1996. Copies of the Offer Document will be available for collection from Baring Brothers International Limited, 60 London Wall, London EC2M 5TU. Forms of Acceptance are available at Lloyds Bank Registers, The Casework, Warburg, West Street, 20099 GDA, Barings, which is regulated by The Securities and Futures Authority Limited, is acting for Westminster and no-one else in connection with the Offer and will not be responsible to anyone other than Westminster for providing the protections afforded to customers of Barings or for giving advice in relation to the Offer.

The Directors of Westminster accept responsibility for the information contained in this advertisement and, to the best of their knowledge and belief (having taken all reasonable care to ensure that such is the case), the information contained in this advertisement is in accordance with the facts and does not omit anything likely to affect the import of such information.

25 June 1996

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Johny Johnsen (left) chief executive, and John Jackson, chairman: good performance in Europe

### Howden held back by slack demand and loss at fan arm

By Geoff Dyer

Losses at its North American fans business held back the increase in annual profits at Howden, the Scottish industrial equipment manufacturer, to a modest 7 per cent before exceptional.

Pre-tax profits were £42.9m (£30.8m), including a £10.3m profit from the sale of a 43 per cent stake in Howden Africa Holdings, which was floated in Johannesburg in March.

Operating profits in the year to April 30 were 9 per cent higher at £37.2m after an improved performance in

Europe compensated for the downturn in North America. The shares rose 6 1/2p to 74 1/2p.

Mr Alan MacLachlan, director of corporate services, said that the group, which saw gearing drop from 35 per cent to 17 per cent, was considering a number of acquisitions in Asia and Europe.

Profits in North America fell to £700,000 (£9.8m) after Howden Fan recorded losses of more than £2m because of a strike and reduced sales of power station fans.

Mr MacLachlan said that the business would return to profitability this year, but would

take two years to recover fully. The European division lifted profits 60 per cent to £28.8m after a higher contribution from all the businesses, although the German tunnel boring machine company continued to suffer from low orders. The group cautioned that market conditions in Europe, particularly Germany, were becoming increasingly difficult.

Earnings per share were 11.5p (7.6p), and 8p before exceptional. The recommended final dividend is 1.95p (1.81p) making 2.9p (2.7p) for the year, a 7 per cent increase.

### Fear of crime lifts Norbain

By Jane Martinson

The fear of rising crime helped lift pre-tax profits 28 per cent at Norbain, the closed-circuit television supplier, from £4.16m (£6.36m) to £5.34m.

Organic growth was the main factor behind a 28 per cent increase in sales to £72.5m (£56.7m) in the year to April 30. Operating profits also rose 28 per cent, to £5.33m (£4.54m).

The shares rose 13p to a year-high of 53 1/2p yesterday. Mr Mick Daw, managing director, said demand had been strongest in city centres, hospitals and car parks. There had also been more demand from

schools, particularly after the Dunblane tragedy.

"It's the lack of a feelgood factor in society," he said. "People want to feel that they are getting protection."

Police forces were also installing more circuits. Although the group expects UK demand to be buoyant for the foreseeable future it is keen to expand in Europe. Mr Daw said that the impact of the Irish problems had meant that the UK had been far readier to consider CCTV. He expected this to change, as the economies of both France and Germany worsened.

The group's French division was expected to make a loss in the current year, he said, although it was already benefiting from a change of management. The group was considering acquisitions in foreign markets.

The company, which joined the main market a year ago, paid £2.6m for the UK-based AlarmExpress, an alarm distributor, in March this year. The purchase, which had a marginal effect on sales, increased net debt to about £4m and gearing more than doubled from 13 per cent to 31 per cent.

A final dividend of 5p raises the total 60 per cent to 7.5p.

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COMMODITIES AND AGRICULTURE

'Reform needed to sustain Asian gold boom'

By Kenneth Gooding, Mining Correspondent, in Venice

The Asian jewellery industry was one of the great success stories of the past decade. Production of gold jewellery increased from 277 tonnes in 1986 to 1,133 tonnes in 1995 and the region's share of world output jumped from 30 per cent to 50 per cent.

fiscal and regulatory barriers that prevent the wider ownership and freer movement of gold," he said. Improvements were also needed to the regional gold product purity and distribution systems.

policy was moving towards a free market mechanism, a transitional period was required before the country would have an open gold market. In the meantime, while China had a gold shortage, its central bank would import to ensure the country's jewellery industry had enough raw material.

gold jewellery manufacture to gravitate towards low wage countries in Asia and Latin America because it was much more labour intensive than other gold fabrication. Mr Klapwijk said that in spite of the lack of interest from western investors and the challenge to the market of central bank sales, gold should not be written off.

considered other European countries - while at the same time increasing the level of export. Present lack of interest in gold among western investors was illustrated by Mr Peter Palmado, president, Sun Valley Gold Company, who pointed out that gold's "Daily Sentiment Index" was at its lowest point for ten years.

He also insisted that Asia's traditional penchant for gold combined with a fast growing population, generally high savings rates and increasing disposable incomes should underwrite a rising gold demand trend into the early 21st century.

China was already the world's third largest gold jewellery consuming country - after India and the US - Mr Raymond Chan Fat Chu, chairman of Tam Fat Hing Fung (Holdings), pointed out. About one third was bought for investment rather than adornment.

He said "apart from the risks posed to demand from political changes in the key consuming countries of China and India, there is the greater sensitivity to price of Asian demand. Demand for low mark-up investment jewellery usually falls when the gold price rises sharply".

Mr Fabio Torboli, chief executive, Europe, at the World Gold Council, said the growth of the Asian jewellery industry had created a critical situation for most European manufacturers. Their output had remained static for 27 years while gold jewellery sales had doubled.

Mr James Riley Jr, partner in J. Aron and Co. - Goldman Sachs, insisted that timing was all important with all investments. While gold had long been regarded for most of the past year as a safe haven, it was now competing with many other traded commodities for a share of the vast amount of money out there looking for a return.

MARKET REPORT

Selling hits white sugar futures

The London Commodity Exchange's August delivery white SUGAR futures contract ran into broad-based selling in heavy trading yesterday afternoon, sinking by more than \$7 a tonne. One trade house was reported to have been an active seller of the August contract but some producer selling was also reported.

RTZ-CRA to sell Kembla coal mines

By Nikkai Tait in Sydney

RTZ-CRA, the Anglo-Australian mining group, is to sell the two New South Wales coal mines that make up its troubled Kembla Coal & Coke subsidiary, and has called in Macquarie Bank Corporate Finance to handle the disposal.

assets were put at A\$306m. Problems extended into 1995, although RTZ-CRA said that in the fourth quarter production "approached normal levels" and total production for the year was almost 2.5m tonnes.

Colombian agriculture struggles for survival in an insecure environment

Sarita Kendall on a sector that has to contend with guerrilla violence as well as the vagaries of the weather and the market

Agriculture has become a risky business in Colombia, not so much because farmers must contend with fluctuating rainfall and prices, but because guerrilla violence has deepened and spread to nearly two thirds of the nation's rural areas.

crops has fallen by 600,000 hectares in the past six years and some yield rates are also down. Both commercial and peasant farmers agree that agriculture is in crisis and lay most of the blame on high interest rates and government neglect.

point is, they must be implemented and our participation ensured... a new law, for what? "The increasing concentration of land ownership is one of the main causes of conflict. Over the past ten years drug traffickers and their associates have used land purchases to launder money, buying up some 6m hectares and turning most of them over to cattle pasture.

researcher at the centre for popular education and research, CINEP. "These months have been particularly violent, with a great many families displaced." The economic effects of rural violence, as well as kidnapping and regular extortion by guerrillas, have been underlined, according to a study by the former presidential commissioner for peace, Jesus Antonio Bejarano.

reduced spending on social programmes and infrastructure and unemployment in the region has risen. Here too, drug traffickers have bought good land at low prices. Although increased productivity has kept coffee output steady at 12 to 13m bags a year, the region is not as prosperous as it used to be and fear of kidnapping keeps landowners away from their properties, affecting the quality of management.

stolen and labour problems make it difficult to maintain agricultural standards - yet, against all odds, disease control has improved and banana exports from Uraba may be up during 1996. Agricultural exports, excluding coffee, still contribute some 15 per cent of Colombia's foreign income and the sector is expected to grow by about 3.8 per cent this year.

prices are so depressed that there are good opportunities for land reform. What has become clear to all is that there is no point just distributing land without the tools and support to make it produce. The small farmer can and should become a small businessman.

The government is proposing to appropriate part of the land owned by traffickers and to use it for land reform programmes. If peasants sandwiched between the paramilitary and the guerrillas are to survive, let alone produce and market their crops successfully, such programmes would require far greater funding than is currently available.

COMMODITIES PRICES

BASE METALS

Table with columns for metal type, price, and change. Includes Aluminum, Copper, Lead, Zinc, Tin.

Precious Metals continued

Table with columns for metal type, price, and change. Includes Gold, Silver, Platinum, Palladium.

GRAINS AND OIL SEEDS

Table with columns for grain type, price, and change. Includes Wheat, Maize, Soyabean Meal, Soyabean Oil.

SOFTS

Table with columns for soft type, price, and change. Includes Cocoa, Coffee, Sugar.

MEAT AND LIVESTOCK

Table with columns for meat type, price, and change. Includes Live Cattle, Live Hogs, Pork.

ENERGY

Table with columns for energy type, price, and change. Includes Crude Oil, Heating Oil, Natural Gas.

PRECIOUS METALS

Table with columns for metal type, price, and change. Includes Gold, Silver, Platinum, Palladium.

FUTURES DATA

Table with columns for future type, price, and change. Includes Wheat, Corn, Soyabean.

INDICES

Table with columns for index type, price, and change. Includes FTSE 100, Nikkei, DAX.

LONDON TRADED OPTIONS

Table with columns for option type, price, and change. Includes Call, Put options for various commodities.

LONDON SPOT MARKETS

Table with columns for spot type, price, and change. Includes Crude Oil, Heating Oil, Natural Gas.

JOTTER PAD: A grid for taking notes or calculations.

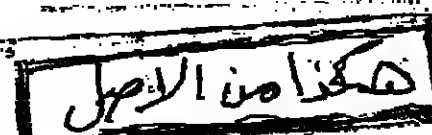
CROSSWORD

No.9,104 Set by ADAMANT

Crossword puzzle grid with numbers indicating starting positions for words.

- 1 Supplies flowers (6)
2 Doctor grounded the person nobody expects to win (8)
3 Damages those left at the inn (6)
4 The second little trial was the most gratifying (5)
5 Perhaps count the fish for the young master (5)
6 Fail to follow lead of green (6)
7 Run on event (4)
8 Takes the bones out of the steaks (7)
9 Put cover back on novel (quandary) (7)
10 Recognise how to deny it if returned (8)
11 Shin, for example, contains top class of beef (6)
12 Talk of society stunner, say (6)
13 They are learning about Charles so leave Edward I out (6)
14 Burst out during month and get in the way (8)
15 Joint manoeuvres? On the contrary (6)
16 Creature needing fresh shirt (4)
17 Water and air for men in sort of steel cage (8)
18 Laces breadth on the Spanish train (8)
19 Where the tabloids pronounce on Germany? (6)
20 Someone who knows popular colour is coming back (7)
21 Going down in a straight line, his job is often a drain (7)
22 Ghr's bloomer is a catastrophe (8)
23 Woodland gods lie around in terrible sin (6)
24 Firm, you said, brought in outside salesman to get the money back (6)
25 In America diplomats find alien bodies (4)
Solution 9,103

RECAPITULATED DOWN: A list of words and their corresponding crossword positions.





INTERNATIONAL CAPITAL MARKETS

Asset-backed offering to raise FF5bn

By Conner Middelmann and Antonia Starpe

Growing interest among European investors for asset-backed securities spurred yesterday's launch of the largest French franc securitisation, Tritiphar 06-96.

The four-tranche offering of floating-rate notes, totalling FF5bn, is backed by long-term loans granted by Credit Lyonnais.

INTERNATIONAL BONDS

Notes to pharmacists seeking to buy or moderate their premises. The structure was enhanced by a cash deposit from the Credit Lyonnais group, a letter of credit from Bayerische Vereinsbank and an unconditional guarantee from MBIA.

According to lead manager Credit Lyonnais, about 75 per cent of the FF1.75bn A1 tranche was placed by French institutions; the FF1.5bn A2 tranche was split evenly between France and the rest of Europe; and some 95 per cent of the FF1.25bn A4 tranche went abroad.

"More and more European investors are showing interest in securitised deals, partly

because they offer an attractive pick-up for triple-A rated paper," a syndicate official said.

Another milestone transaction came for the City of New York, which became the first US municipality to issue a eurobond in a deal that could set a precedent for other such borrowers. The city launched \$180.5m of bonds as part of the taxable debt it raises - around \$300m a year - to finance projects that do not qualify for tax-exempt status under federal law.

Birmingham Midshires, the UK's 10th largest building society, launched £100m of five-year floating-rate notes, the first issue under its new £750m euro medium-term note programme, via SBC Warburg.

China is expected to launch its global bond as soon as today. Dealers were expecting a \$700m five-year offering, although some said a 10-year tranche could raise the total amount to \$1bn.

The five-year paper is expected to be priced at 20 to 85 basis points over Treasuries.

NEW INTERNATIONAL BOND ISSUES

Table with columns: Amount, Coupon, Price, Maturity, Fees, Spread, Book-runner. Lists various international bond issues from US Dollars, Canadian Dollars, Australian Dollars, and Danish Kroner.

Final terms, non-callable unless stated. Yield spread from gov bond at launch supplied by lead manager. \*Unrated. †Floating rate. ‡Interest annual coupon. R: fixed at offer price; less shown at re-offer level. \$1,000 launched 18/06/96 increased to \$150m. \$100m launched 18/06/96 increased to \$150m. \$100m launched 18/06/96 increased to \$150m.

enabled it to set a large conversion premium of 25 per cent. The five-year bonds, which are non-callable for three years, have a coupon of 1 per cent and a yield to maturity of 4.4 per cent.

Fall in consumer confidence index lifts Treasuries

By Lisa Branstetter in New York and Richard Lapper in London

Signs of deteriorating consumer confidence helped US Treasury prices rise by midday yesterday, despite worries that demand would be weak at the afternoon auction of two-year notes. The mood in the US spread over into Europe, where both core and peripheral markets made modest ground in thin trading.

Near midday, the benchmark 30-year US Treasury was up 4

at 86 1/2 to yield 7.066 per cent while the two-year note added 1/8 to 89 1/2, yielding 6.275 per cent. The September 30-year Treasury bond future was 1/2 higher at 107.

Treasuries rose at mid-morning after the Conference Board said its index of consumer confidence fell to 97.6 in June from 103.5 in May. That suggested that consumer demand is less likely to exert inflationary pressures in coming months.

continued to rise in May, in part because the figures were older than the consumer confidence data.

GOVERNMENT BONDS

Mr Kevin Stiner, a senior fixed-income trader at Citicorp Chicago Securities, said jitters about a poor showing when the Treasury department auctions \$18.75bn in two-year notes may have prevented stronger gains.

The Treasury is to sell \$12.5bn in five-year paper today, with the consumer confidence data.

In Europe, volumes were again low, largely because of uncertainty about interest rates ahead of a Bundesbank meeting on Thursday and the FOMC meeting next week.

High-yielding markets again outperformed, with the expectation of imminent interest rate cuts again supporting prices in Italy, especially at the short end.

On Liffe, the September BTP future settled at 116.89, up 0.39. Spain tracked Italy, with the September bond closing at 110.24, up 0.16. Italian, Spanish and Swedish 10-year bond spreads over bunds narrowed by 4, 3 and 5 basis points respectively to 287, 294 and 165 basis points.

Regional equity derivatives from VTOB

By Kester Eddy in Budapest

VTOB, Austria's futures and options exchange, and Creditanstalt Investment Bank are to launch equity derivatives based on VTOB's new CECE Index family covering the Hungarian, Czech, Polish and Slovak markets.

Initially, products will include futures and options priced in US dollars on the Hungarian Traded Index (HTX), consisting of 10 leading shares, the Czech Traded Index (CTX), 14 shares, the Slovakian Traded Index (STX, 7 shares) and the CECE Index (a capitalisation-weighted index made up of the four national indices).

Index values will be published from July 15 based on daily closing stock prices, with real time calculations expected in the autumn when trading begins on the VTOB. In the second phase, stock options on leading regional shares will be introduced in 1997.

The products have been developed for western institutional investors, which lead to the region as a whole and the emerging banking, hedging instruments as central European bourses have developed over the past six years, the VTOB said.

For this reason, the CECE indices are based on a much narrower range of shares than the world indices, concentrating only on the larger companies and most liquid stock. Nevertheless, they correlate well with local indices and generally cover more than 80 per cent of the respective market capitalisation, the VTOB added.

Scottish Power replaces Southern Water bid finance

By Antonia Starpe

A new £2.6bn revolving credit facility for Scottish Power, to support its improved and successful £1.67bn cash offer for Southern Water, has been the most notable new addition to the international syndicated loans market in the past week.

The new five-year facility will replace the £1.5bn facility that Scottish Power took out when it made its initial offer.

SYNDICATED LOANS

for Southern Water, as well as the £800m facility signed in August 1995 to finance its acquisition of Manweb, a regional electricity company. Royal Bank of Scotland, Union Bank of Switzerland, and ING Barings have underwritten the new deal. The opening margin is 2.74 basis points over London Interbank offered rate, guaranteed until the end of March 1997.

Thereafter, the margin should fall in line with a decline in the company's gearing, to the core margin of 20 basis points agreed on the previous facility. Of the total, £500m is repayable at the end of the third year and £20m at the end of the fifth year.

Bankers involved in the transaction said banks that sub-underwrote the previous loan would be asked to participate in the new facility. They said banks that had supported a competing facility for Southern Electric, which had also wanted to buy Southern Water, would also be invited now that the conflict of interest had been removed.

WORLD BOND PRICES

BENCHMARK GOVERNMENT BONDS

Table with columns: Country, Coupon, Price, Yield, Week ago, Month ago. Lists benchmark government bonds for Australia, Austria, Belgium, Canada, Denmark, Germany, Italy, Japan, Netherlands, Portugal, Spain, Sweden, UK, US Treasury, and EU.

US INTEREST RATES

Table with columns: Rate, 1 month, 3 month, 6 month, 1 year, 2 year, 3 year, 5 year. Lists US interest rates for Treasury bills and bond yields.

BOND FUTURES AND OPTIONS

FRANCE

Table with columns: Open, High, Low, Est. vol., Open Int. Lists French bond futures and options data.

GERMANY

Table with columns: Open, High, Low, Est. vol., Open Int. Lists German bond futures and options data.

UK GILTS PRICES

Table with columns: Issue, Yield, Price, % chg. Lists UK gilt prices for various issues.

EU BOND FUTURES OPTIONS (LIFE) DM250,000 points of 100%

Table with columns: Strike, Price, Call, Put, Dec, Aug, Sep, Oct, Dec. Lists EU bond futures options data.

ITALY

Table with columns: Open, Settle, Price, Change, High, Low, Est. vol., Open Int. Lists Italian bond futures data.

SPAIN

Table with columns: Open, Settle, Price, Change, High, Low, Est. vol., Open Int. Lists Spanish bond futures data.

EURO

Table with columns: Open, Settle, Price, Change, High, Low, Est. vol., Open Int. Lists Euro bond futures data.

US

Table with columns: Open, Settle, Price, Change, High, Low, Est. vol., Open Int. Lists US Treasury bond futures data.

JAPAN

Table with columns: Open, Settle, Price, Change, High, Low, Est. vol., Open Int. Lists Japanese government bond futures data.

FT-ACTUARIES FIXED INTEREST INDICES

Table with columns: Price Index, UK Index, 1-5 years, 5-10 years, 10-15 years, 15-20 years, 20-25 years, 25-30 years, 30+ years. Lists FT-actuaries fixed interest indices.

FT FIXED INTEREST INDICES

Table with columns: Date, 1-5 years, 5-10 years, 10-15 years, 15-20 years, 20-25 years, 25-30 years, 30+ years. Lists FT fixed interest indices.

FT/ISMA INTERNATIONAL BOND SERVICE

Table with columns: Issue, Bid, Offer, Chg. Lists FT/ISMA international bond service data.

GILT EDGED INDICES

Table with columns: Date, 1-5 years, 5-10 years, 10-15 years, 15-20 years, 20-25 years, 25-30 years, 30+ years. Lists gilt edged indices.

OTHER STRATEGISTS

Table with columns: Issue, Bid, Offer, Chg. Lists other strategists data.

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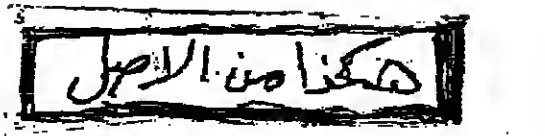
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Large table at the bottom of the page containing various financial data, including bond prices, interest rates, and other market indicators.





CURRENCIES AND MONEY

MARKETS REVIEW

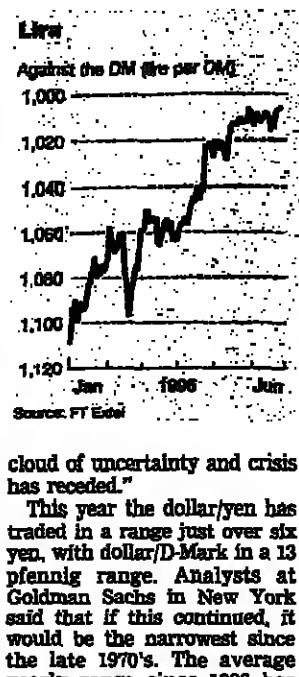
Lira prepares for assault on key L1,000 level

By Philip Sewell

An otherwise unremarkable day on the foreign exchanges was enlivened by the spectacle of whether or not the lira would be able to make a sustained breach of L1,000...

markets have been so quiet recently, Mr Larry Summers, the Deputy Secretary of the US Treasury, provided at least part of the answer in a speech earlier this week.

mental shift in one of the leading currencies. He also noted that the G-7 had produced fewer communiqués, "but when we chose to send a formal co-ordinated signal - as we did in April 1995 when we called for 'orderly reversal' of exchange rate movements - we made sure it meant something."



The current one month implied volatility for dollar/yen is 7.6 per cent, and 7.1 per cent for dollar/D-Mark. This compares with historical figures of 10.7 per cent and 12 per cent respectively.

The Bundesbank's trade weighted index of the D-Mark's value was 13.6 at the end of May, down 3.2 per cent from the end of 1995, but 0.1 per cent above the end of 1994.

POUND SPOT FORWARD AGAINST THE POUND

Table with columns for currency, date, and various market data points for the Pound Spot Forward.

DOLLAR SPOT FORWARD AGAINST THE DOLLAR

Table with columns for currency, date, and various market data points for the Dollar Spot Forward.

OTHER CURRENCIES

Table listing various other currencies and their market data.

EURO CURRENCY INTEREST RATES

Table showing interest rates for various Euro currencies.

EURO CURRENCY INTEREST RATES

Table showing interest rates for various Euro currencies.

WORLD INTEREST RATES

Table with columns for Money Rates, Euro Currency Interest Rates, and other financial data.

CROSS RATES AND DERIVATIVES

Table containing Exchange Cross Rates and various derivatives data.

EURO CURRENCY INTEREST RATES

Table showing interest rates for various Euro currencies.

UK INTEREST RATES

Table showing interest rates for the UK.

BASE LENDING RATES

Table showing base lending rates for various banks.

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Advertisement for HYUNDAI ENGINEERING & CONSTRUCTION CO. LTD. featuring a logo and company details.

Advertisement for RIDDLETON LIMITED, offering HKD 1,000,000 Floating Rate Guaranteed Bonds.

Advertisement for FIRST PACIFIC CAPITAL LIMITED, offering Floating Rate Notes due 1997.

Advertisement for ANZ Bank, Australia and New Zealand Banking Group Limited.

Advertisement for S.G.W. Finance plc, offering Guaranteed Floating Rate Notes 1998.

Advertisement for APPOINTMENTS ADVERTISING, offering services in the UK.

Advertisement for COUNTRY SURVEYS, offering surveying services.

Advertisement for PUBLIC SPEAKING, offering training and speech writing services.



LONDON SHARE SERVICE

ALCOHOLIC BEVERAGES

Table listing companies in the Alcoholic Beverages sector, including names and share prices.

BANKS, MERCHANT

Table listing companies in the Banks and Merchant sector, including names and share prices.

BANKS, RETAIL

Table listing companies in the Banks and Retail sector, including names and share prices.

BREWERS, PUBS & REST

Table listing companies in the Brewers, Pubs & Restaurants sector, including names and share prices.

BUILDING & CONSTRUCTION

Table listing companies in the Building & Construction sector, including names and share prices.

BUILDING MATS. & MERCHANTS

Table listing companies in the Building Materials & Merchants sector, including names and share prices.

CHEMICALS

Table listing companies in the Chemicals sector, including names and share prices.

DISTRIBUTORS

Table listing companies in the Distributors sector, including names and share prices.

DIVERSIFIED INDUSTRIALS

Table listing companies in the Diversified Industrials sector, including names and share prices.

ELECTRICITY

Table listing companies in the Electricity sector, including names and share prices.

ELECTRONIC & ELECTRICAL EQPT

Table listing companies in the Electronic & Electrical Equipment sector, including names and share prices.

ENGINEERING, VEHICLES

Table listing companies in the Engineering and Vehicles sector, including names and share prices.

ENGINEERING

Table listing companies in the Engineering sector, including names and share prices.

ENGINEERING - Cont.

Continuation of the Engineering sector table.

EXTRACTIVE INDUSTRIES

Table listing companies in the Extractive Industries sector, including names and share prices.

EXTRACTIVE INDUSTRIES - Cont.

Continuation of the Extractive Industries sector table.

ENGINEERING - Cont.

Continuation of the Engineering sector table.

EXTRACTIVE INDUSTRIES

Continuation of the Extractive Industries sector table.

EXTRACTIVE INDUSTRIES - Cont.

Continuation of the Extractive Industries sector table.

ENGINEERING

Table listing companies in the Engineering sector, including names and share prices.

EXTRACTIVE INDUSTRIES

Table listing companies in the Extractive Industries sector, including names and share prices.

FOOD PRODUCERS

Table listing companies in the Food Producers sector, including names and share prices.

FOOD PRODUCERS - Cont.

Continuation of the Food Producers sector table.

GAS DISTRIBUTION

Table listing companies in the Gas Distribution sector, including names and share prices.

HEALTH CARE

Table listing companies in the Health Care sector, including names and share prices.

HOUSEHOLD GOODS

Table listing companies in the Household Goods sector, including names and share prices.

INSURANCE

Table listing companies in the Insurance sector, including names and share prices.

INVESTMENT TRUSTS

Table listing companies in the Investment Trusts sector, including names and share prices.

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INVESTMENT TRUSTS - Cont.

Continuation of the Investment Trusts sector table.

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Advertisement for PINNACLE, featuring a mountain logo and text: 'In a word, PINNACLE. Aiming to provide the highest service levels in contract hire and fleet management. 0800 269895. For contract hire and vehicle management. ACL. A Division of Contract Hire Group. HEAD OFFICE: 24-26 Newport Road, Cardiff CF2 1SR. Fax: 01222 438729.'

Vertical text on the right edge of the page, including 'OTHER INVESTMENT' and 'INVESTMENT COMPANIES'.











FT MANAGED FUNDS SERVICE

FT Cityline Unit Trust Prices are available over the telephone. Call the FT Cityline Help Desk on (+44 171) 578 4378 for more details.

Main table containing financial data for various funds, including columns for fund names, unit prices, and performance metrics. The table is organized into several sections: 'Other Offshore Funds', 'Offshore Insurances', and 'Managed Funds Notes'.

OTHER OFFSHORE FUNDS

OFFSHORE INSURANCES

MANAGED FUNDS NOTES
Please note that these units are not redeemable until the
completion of the 12 month period following the date of
issue. Units are not redeemable until the completion of
the 12 month period following the date of issue. Units are
not redeemable until the completion of the 12 month
period following the date of issue. Units are not
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period following the date of issue.

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LONDON STOCK EXCHANGE

MARKET REPORT

Faltering futures market drags down equities

By Peter John

With nothing to play for but football and tennis, London's equity dealers and investors kept a low profile for most of yesterday.

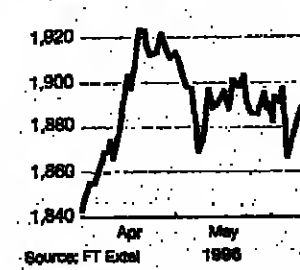
highest level for well over a week and far higher than on Monday, when customer business was worth only £1.8bn.

On the other hand, the market torpor had its predictable side. The City tends to rate sport above most things, and Euro 96 football fever has smitten most dealers, while the opening matches at Wimbledon absorb the remainder.

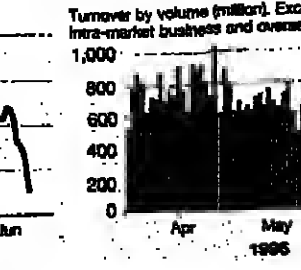
It was the futures that dragged the Footsie down by 26 in the morning, while late equity selling was seen as being responsible for the market's afternoon fall, which pushed the FT-SE 100 down again to close 31.3 lower at 3,679.5.

The majority of institutional investors appeared to be concentrating on writing their first-half reports rather than using their liquidity to buy stocks.

FT-SE-A All-Share Index



Equity shares traded



Indices and ratios

Table with 3 columns: Index Name, Value, Change. Includes FT-SE 100 (3679.5, -31.3), FT-SE Mid 250 (4364.5, -48.8), FT-SE-A 350 (1861.5, -16.9), FT-SE-A All-Share (1849.55, -18.24), FT-SE-A All-Share yield (3.88, 3.84).

Best performing sectors

Table with 2 columns: Sector, Change. Includes 1. Alcoholic Beverages (+0.1), 2. Life Assurance (+0.1), 3. Engineering Vehicles (+0.1), 4. Transport (-0.1), 5. Food Producers (-0.1).

Worst performing sectors

Table with 2 columns: Sector, Change. Includes 1. Diversified Industrials (-2.5), 2. Insurance (-1.8), 3. Retailing & Merchs (-1.2), 4. Retailers: General (-1.5), 5. Telecommunications (-1.5).

Grid dips as stake sold

Late trade in National Grid Group caused a buzz in the dumpy minutes of the session. Turnover in the stock jumped to 88m shares, the second highest daily total since the company was privatised last year.

BAA boosted

UK airports group BAA yesterday shook off its recent blues and moved strongly ahead, boosted by a broker's recommendation.

GrandMet tipped

There may be light at the end of the tunnel for shares in Grand Metropolitan, with several brokers tipping the stock, including Lehman Brothers which reiterated its "buy" recommendation.

London market data

Table with 3 columns: Index Name, Value, Change. Includes FT-SE 100 (3679.5, -31.3), FT-SE Mid 250 (4364.5, -48.8), FT-SE-A 350 (1861.5, -16.9), FT-SE-A All-Share (1849.55, -18.24).

Hourly movements

Table with 3 columns: Index Name, Value, Change. Includes FT-SE 100 (3679.5, -31.3), FT-SE Mid 250 (4364.5, -48.8), FT-SE-A 350 (1861.5, -16.9), FT-SE-A All-Share (1849.55, -18.24).

FT-SE 100 Index Futures

Table with 3 columns: Index Name, Value, Change. Includes FT-SE 100 Index Futures (3679.5, -31.3), FT-SE Mid 250 Index Futures (4364.5, -48.8).

FT-SE 100 Index Options

Table with 3 columns: Index Name, Value, Change. Includes FT-SE 100 Index Options (3679.5, -31.3), FT-SE Mid 250 Index Options (4364.5, -48.8).

Trading Volume

Table with 3 columns: Stock Name, Volume, Change. Includes BAA, GrandMet, National Grid, etc.

But a later theory, which came from sources close to National Grid, suggested that one broker may have decided to go short of the stock.

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WORLD STOCK MARKETS

EUROPE

Table of stock market data for Europe, including Austria (Jun 25 / Sch), Germany (Jun 25 / DM), and other regional indices.

ASIA

Table of stock market data for Asia, including Hong Kong (Jun 25 / HK\$), Japan (Jun 25 / Yen), and other regional indices.

AMERICA

Table of stock market data for America, including Canada (Jun 25 / Cdn\$), Mexico (Jun 25 / Mex\$), and other regional indices.

AFRICA

Table of stock market data for Africa, including South Africa (Jun 25 / Rand), Egypt (Jun 25 / EGP), and other regional indices.

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Table of stock market data for island markets, including New Zealand (Jun 25 / NZ\$), Singapore (Jun 25 / S\$), and other regional indices.

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4 pm close June 25

NEW YORK STOCK EXCHANGE PRICES

Main table of stock prices with columns for stock symbols, prices, and changes. Includes sub-sections for 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M', 'N', 'O', 'P', 'Q', 'R', 'S', 'T', 'U', 'V', 'W', 'X', 'Y', 'Z'.

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Continued on next page



NYSE PRICES

NASDAQ NATIONAL MARKET

4 pm close June 25

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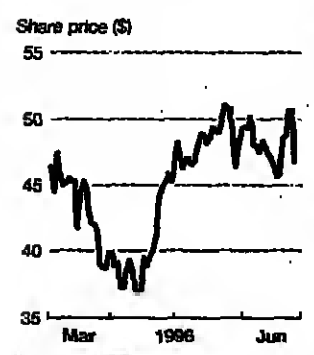
AMERICA

Worries over economy hit Dow index

Wall Street

Worries about the strength of the US economy sent share prices lower in early trading...

Scam



be most affected by economic slowing, underperformed other sectors yesterday with the Morgan Stanley index of cyclical shares off 0.7 per cent...

Mexico extends rally

Latin American stocks made a mixed start to the day, with Mexico turning in one of the better lunchtime performances...

South Africa broadly higher

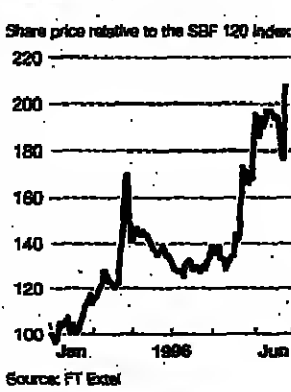
Equities on the Johannesburg market closed firm after a day of quiet trading. Industrial stocks recovered from Monday's weakness...

EUROPE

Allianz into overdrive, Dax scales all-time peak

Europe's biggest insurer, Allianz, went into overdrive and Frankfurt's Dax index followed hitting an all-time high with help from a strengthening dollar and firm bonds...

Dassault Aviation



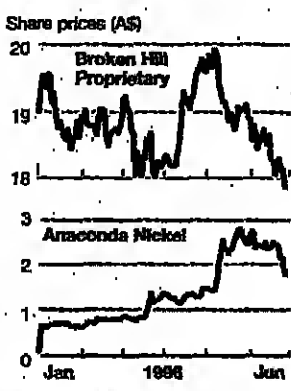
PARIS combined broadly based rise in blue chips, boosted by a stronger domestic bond market, with stronger gains for speculative issues as the CAC-40 closed 20.8 higher at 2,118.43...

ASIA PACIFIC

Sentiment stays bullish as Nikkei ends slightly lower

Tokyo

The Nikkei average finished lower for the first time in six trading days. However, the fall was marginal and sentiment remained bullish...



mixed. Nagasaki, the super-market chain, was the most active issue of the day, leaping Y4 to Y91, and Kanematsu, the medium sized trading company...

FFr29.20, or 14 per cent, to FFr228. Credit Lyonnais certificates put on FFr35.50, or 13.6 per cent, at FFr129.40 after the ailing state-owned bank told unions that it wanted to eliminate 5,000 out of 25,000 jobs by the end of 1998...

FT-SE Actuaries Share Indices

Table with columns for Date, Open, High, Low, Close and rows for FT-SE 100, FT-SE 250, FT-SE 350.

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FT/S&P ACTUARIES WORLD INDICES

Large table with columns for Regional Market, US Dollar Index, Day's Change, and various indices for different regions.

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# POWER GENERATION EQUIPMENT

## Intense competition squeezes margins

Companies which have already cut costs repeatedly are redoubling their efforts to find savings. But the manufacturers are under pressure to pass the benefits on to their customers, putting further pressure on prices. Stefan Wagstyl reports

There seems little end in sight to the long war of attrition in the power engineering industry. Even though demand for new plant has never been greater, intense competition among leading suppliers is depressing prices and squeezing profit margins. Despite some cuts in capacity, the industry is still paying the price for its over-expansion in the late 1980s and early 1990s. As Mr Adolf Hüttl, president of KWL, the power business of Germany's Siemens, says: "The whole power engineering industry is hoping that the erosion of prices will slow. But it is only a hope."

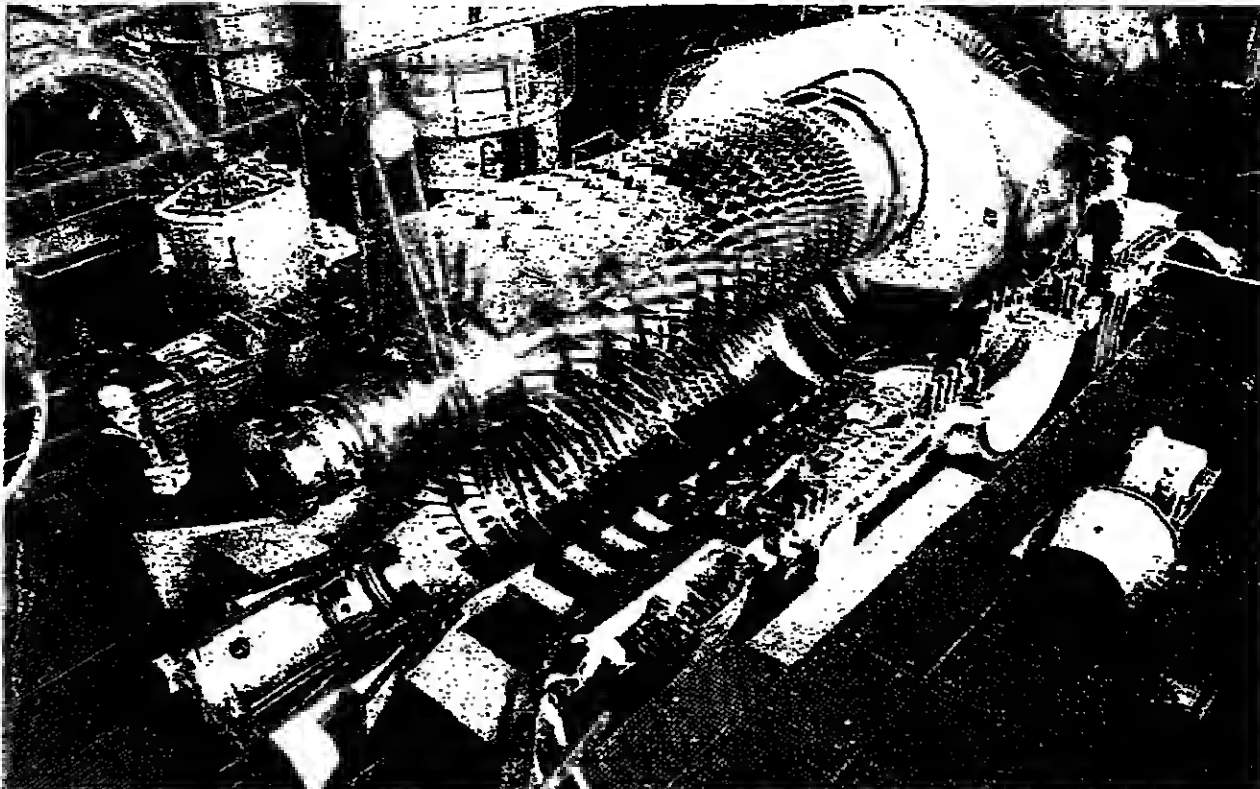
Companies which have already cut costs repeatedly are redoubling their efforts to find savings. In the biggest step so far, Westinghouse of the US earlier this year closed its factory at Pensacola with the loss of 650 jobs and transferred production, mainly to a bigger plant at Charlotte.

North Carolina. But with rivals also making savings, the manufacturers are under pressure to pass the benefits on to their customers, putting further pressure on prices. Orders are recovering this year after a slow-down last year caused by temporary delays in completing contracts in developing countries. However, in the absence of an unexpectedly dramatic increase, prices are unlikely to recover any of the 30 per cent fall seen over the past three years and could fall even further.

Mr Armin Meyer, director of the power generation division at ABB, the Swiss-Swedish group, says: "In volume terms, the world power generation market is still growing, but only by 2-4 per cent a year. In money terms, with the continuous cost reductions, I expect the market to be flat."

Mr Ron Pressman, vice-president of marketing at the power systems division of General

Electric of the US, takes a similar view. Some utilities protest that the manufacturers' complaints ring hollow, given their reluctance to cut capacity. But the plant suppliers' financial performance in the 1990s has mostly been dismal. Last year, Westinghouse, one of the top six which dominate the market, posted a \$207m loss in its power systems division, including write-offs. The other five integrated manufacturers - GE, ABB, Siemens, Anglo-French group GEC Alsthom, and Mitsubishi Heavy Industries - saw their margins squeezed. Only ABB increased its declared profits - and that by just 4 per cent. The results are particularly frustrating for the manufacturers because in other respects they are performing well. Since the 1980s, they have adapted to the deregulation of the power industry in the US, the UK and elsewhere; they have developed sales in fast-growing markets in China and other emerging economies; they have cut factory costs by up to 50 per cent and launched new products at an ever-increasing pace. But they have little to show for their labours. This is not what the industry expected when it geared up for



A Siemens gas turbine during assembly in Berlin. Siemens is one of the top six companies which dominate the power engineering market

expansion in the early 1980s in anticipation of growing orders, particularly from independent power companies in the developed world and in fast-growing Asian countries, especially China. The forecast increase in orders has materialised far less quickly than most manufacturers predicted, particularly in

gas turbines. According to GE, in steam turbines, manufacturing capacity stayed unchanged at about 70,000MW a year, about 10-15 per cent ahead of production. But in gas turbines, capacity rose 70 per cent in 1990-94 to 36,000MW, about 20 per cent ahead of production by last year.

In developed countries, it is now painfully obvious to manufacturers that deregulation in the US, the UK and elsewhere has not produced any prolonged increase in orders. After a brief flurry of sales to independent power producers, the markets have been soured by the uncertainty caused by the persistent downward pressure on power prices which is squeezing generators' margins. Plant manufacturers expect little recovery in demand in north America or western Europe before the year 2000. Even in eastern Germany, where unification produced a burst of new business mostly connected with cutting pollution from existing plants, virtually all the orders have already



A liquid crystal test aids design of GE's advanced gas turbine buckets

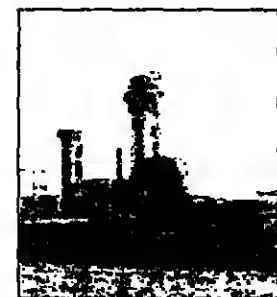
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China has set itself the most ambitious target of any Asian country  
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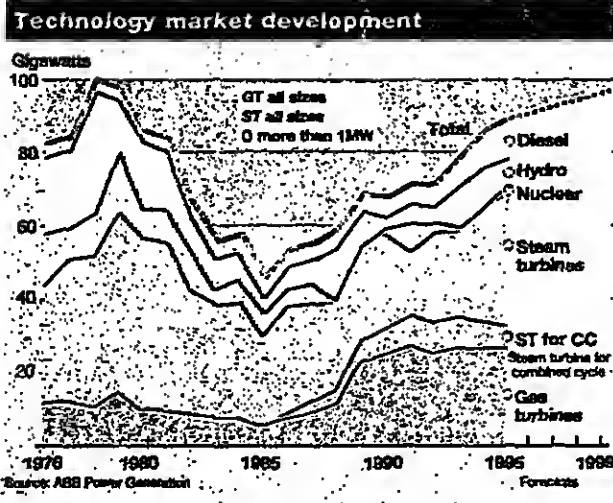
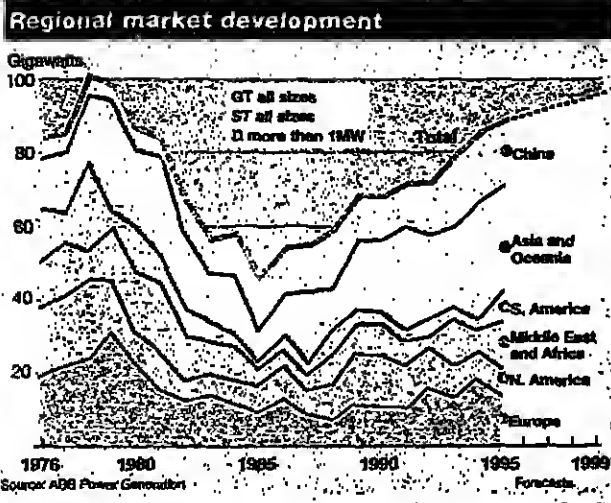
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Aeroderivatives: The industrial rationale for using aero-engines for land-based power generation is strong  
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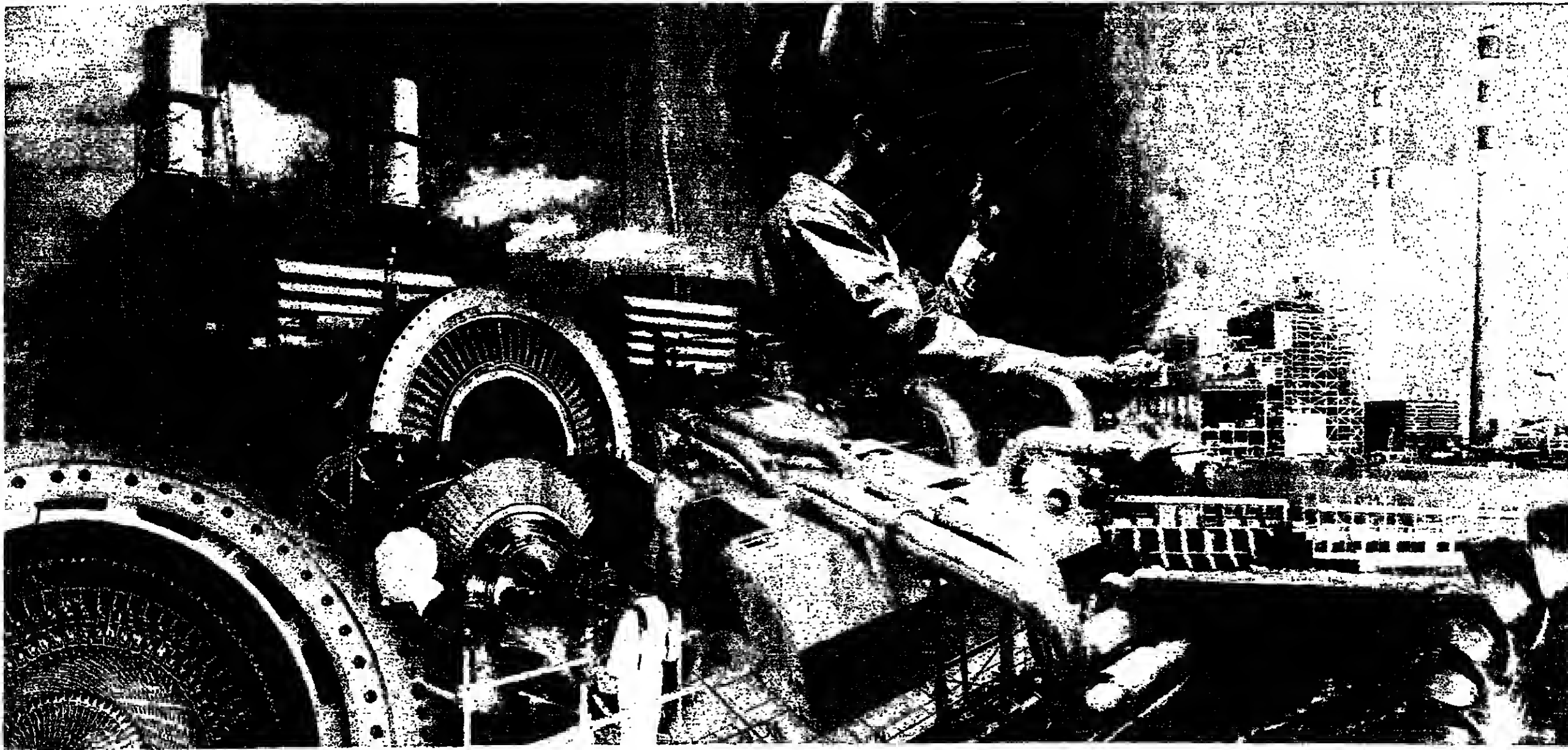
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2 POWER GENERATION EQUIPMENT International perspectives

Japan: by Arnold Redhead in Tokyo

# Asia offers promise

Fierce competition from European, US, Taiwanese, Singaporean and Korean equipment makers has forced some changes in the way the Japanese operate

Asian countries' insatiable appetite for electric power to fuel economic growth presents Japan's power generation equipment manufacturers and utilities with opportunities to make up for a stagnant domestic market.

Power demand in Asia outside Japan is likely to grow at an estimated 8 per cent a year for the next four years, compared with about 2.5 per cent in Japan. China alone will add as much as 15,000MW each year for the next five years - equal to the total capacity of Switzerland.

The World Bank estimates that Vietnam will need 14 per cent increases in capacity each year until 2000.

Generating equipment suppliers such as Toshiba, Hitachi, and Mitsubishi Electric and their trading company allies have been operating outside Japan's borders for some time, with exports making up between 20 and 24 per cent of their power equipment sales. However, fierce competition from European, American, Taiwanese, Singaporean and Korean equipment makers and the strength of the yen has forced some changes in the way the Japanese operate.

Mitsubishi Heavy Industries, for example, has followed the now standard path of shifting some design and boiler assembly work outside Japan, where lower costs help offset the strong yen. The company has design and assembly sites in the Philippines.

Others, such as Toshiba, have made strategic changes. Rather than simply export, they join international consortia often arranged by their trading company partners. Once in, they do not limit their role to equipment supply, instead offering their expertise in an EPC (engineering, procurement, construc-

tion) role, advising on all aspects of power projects.

Toshiba says it targets two or three such projects each year in Asia. It is working on a 1,000MW thermal power plant turnkey project in Anpara, India. The company is the full turnkey supplier for the project. The advantage of this kind of project, according to Toshiba, is that the company can procure local equipment and engineers, lessening its exposure to lost export sales revenue from sudden movements of the yen.

The strategy may also have the effect of turning the suppliers into competitors of Japanese trading companies. Traders such as Mitsui and Mitsubishi have traditionally filled the role of managers of projects, and may see this role usurped as exporters turn to new ways of doing business.

No matter how strong the lure of Asia may be, however, the Japanese say they are not likely to shift the main thrust

## Encouragement from the government may be at hand

of their power equipment business away from Japan. Low projected growth rates are compensated by the regular, stable source of income provided by the domestic market. Power utilities apportion large plant contracts among suppliers so that one company deals with only one project at a time.

The system has been in operation for most of the post-war period, meaning that equipment suppliers always have something to put on the balance sheet. This has taken on increasing importance for companies such as Toshiba and Hitachi, who are seeing profits from other business lines, such as semiconductors and computers, fall amid severe price competition.

Meanwhile, debate has opened up in Japan over whether its 10 regional electric power utilities should bring their advanced technology to Asian markets. The debate was sparked after the Ministry of International

Trade and Industry said in February it would ease a long-standing requirement that electric power providers concentrate on the domestic market.

While never a legal restriction, MITI's "administrative guidance" effectively prevented power companies from offering their expertise outside Japan on anything other than a non-profit, information-sharing basis. Tokyo Electric Power, which supplies power to the capital and is the largest utility in Japan, has taken the first tentative steps, despatching a research team to Indonesia that may look into the joint building and operation with local and foreign partners of a 10,000MW coal-fired power station on Sumatra.

Of the other Japanese suppliers, only Kansai Electric Power, which operates in the Osaka region, is considering an overseas push. Others have only gone as far as expressing an interest in converting their non-profit consulting work into a full business.

The reason for the reluctance is that decades in a safe, stable and regulated environment have left the companies risk-averse. They cast wary glances at Asian markets and see large risk and low returns, or none at all, especially as developing nations tend to keep prices for electricity deliberately low. Other voices worry that if an overseas venture resulted in a loss, consumers in Japan would have to foot the bill through higher charges for electricity. Tokyo Electric Power officials say they realise they have to get involved in overseas markets because the Japanese power market will be saturated by the year 2000. The company says it gets requests to take part in power projects overseas almost on a daily basis.

Further encouragement from the Japanese government may be at hand. A report by MITI's Agency of Natural Resources and Energy, released on May 28, suggested government assistance for power projects overseas in the form of negotiations about lessening risk with local governments, increased export insurance and more financing from the Export-Import Bank of Japan.

India: by Mark Nicholson in New Delhi

# Things are going to get worse

The power ministry believes the sole long-term solution lies in root and branch reform of the largely bankrupt or insolvent state electricity boards

With India's pulverising pre-monsoon heat, and the commensurate rise in demand for power, came the now customary black-outs and power shortages. Consumers in New Delhi suffered rotating two-hour black-outs for much of May; those in Karnataka, where poor monsoon rains had diminished output from its hydro-electric plants, had already been enduring cuts of six to eight hours daily. Few Indian states have been immune from cuts or load-shedding this year.

And the outlook will blacken further before it improves. Four years into the government's policy of opening the power generation sector to private and foreign investment, none of eight big "fast-track" private power projects favoured by the government has yet cleared all necessary approvals.

Only two appear likely to proceed soon. The infamously on-off Dabhol power project in Maharashtra, led by Enron, the US power group, may be just weeks away from final central government clearances to resume the building which was interrupted last year when the new state government initially "cancelled" the project.

Meanwhile, the Mangalore power project, led by Cogentrix, another US power company, is also sanguine about receiving final central government approvals within weeks.

India's new United Front government has said it will continue to encourage substantial private and foreign investment into power. But it has become increasingly clear that such invitations alone are wholly insufficient to solve India's power crisis - one which already threatens to slow industrial output this year and next. Installed capacity of more

than 81,000MW already falls 30 per cent short of peak demand. The ministry has concluded that up to 142,000MW of new capacity will be needed to meet demand over the next decade. And without new private power - with central and state governments largely incapable themselves of big new project investments - incremental output has been modest.

Additional capacity rose by just 3 per cent in the 1995-96 fiscal year; at least one or two percentage points lower than the rise in demand. Much of this came from improvements in the poor plant load capacity of most installed public units. This rose from 60 per cent in 1994-95 to 63 per cent in 1995-96. For the last quarter of that fiscal year, units were averaging a PLC of 63.5 per cent, according to the Centre for Monitoring the Indian Economy, an independent Bombay-based research unit.

In part, the original power policy, hatched by the former Congress party government in 1982, has proven beset with delays and bureaucratic complexities, overlain by the additional complications of India's federal system which means independent power producers must negotiate both with the centre and the state. Most fundamentally, India's power ministry has long since concluded that the sole long-term solution lies in root and branch reform of India's largely bankrupt or insolvent state electricity boards.

"For the next four years there will be a deterioration in the power situation," says a western energy economist. "The only way this can be ameliorated is to reduce some of the state electricity board losses."

The SEBs are the primary generators, transmitters and distributors of Indian power, but they are beholden to the state governments and are therefore highly politicised,



New Delhi: consumers suffered two-hour black-outs. Photo: Tony Anderson

lacking either managerial or commercial freedom. As a result, virtually none of them charge remunerative tariffs and, in particular, almost all charge at best notional charges to farmers, a politically vital constituency in a country where 70 per cent of people live in rural areas.

The consequences of these subsidies are inevitable and grave. The World Bank estimates that the commercial losses of the SEBs totalled \$2.2bn in 1996 - about 0.8 per cent of India's gross domestic product - and they are rising.

Because the SEBs represent the prime purchasers of any privately-generated power, the government's desire to attract foreign and private investment is likely to continue to founder without reform of the SEBs sufficient to make them at least solvent. Hence the focus on SEB reform of the World Bank, the Asian Development Bank and an increasing number of bilateral aid donors. The Bank and the ADB now both make loans to power projects contingent on states' willingness to undertake structural reforms.

So far only one state, the poor north-eastern state of Orissa, has grasped the nettle of reform. The World Bank ear-

only 6 per cent of its power consumers are farmers, making it politically easier for the state government to adjust tariffs.

The reformist zeal of other states has been limited by the fact that most have a far larger agricultural consumer base. But some states are cautiously entertaining radical reforms, forced largely by the desperation of their power position and in some cases the near bankruptcy of state coffers.

The next member of the reform club could be the heavily agricultural northern state of Haryana, where 40 per cent of consumers are farmers. The state has already endorsed Orissa-style reforms and drafted the necessary legislation. The World Bank is also holding talks with neighbouring Rajasthan. And there are glimmerings of serious interest in reform in the poor states of Uttar Pradesh and Bihar.

But virtually all hopes of resolving India's power crisis rest on states undertaking such reforms. More immediate alternatives to boost power output are "extremely limited", according to one energy economist. "Short-term measures have virtually been exhausted," he says. These have included the commissioning of small lignite-based power units in some states, and tendering for mobile power "barges" to moor outside heavily power-deficit states such as Karnataka.

Meanwhile, prospects for foreign and private power groups appear restricted. "On the basis of the existing SEBs and available government and financial sector guarantees for financing, it is possible to finance a handful of projects," says the representative of one big foreign power company. "But the bulk of the investment India needs is going to have to wait for the reform of the SEBs. It is going to be a long process."

China: by Frank Gray

# The most ambitious target

Expansion centres on hydropower, coal-fired generation, and a nuclear power programme likely to be the biggest in developing Asia

China has set itself the most ambitious target of any Asian country for the installation of new electricity generating capacity. By constructing more than 15,000MW of new capacity a year - which it has been doing since the late 1980s - it hopes to reach a level of 300,000MW by the end of the century.

Having just passed the 200,000MW mark by the end of 1995, China will probably fall short of its objective, but analysts are agreed that its efforts have been impressive, particularly because the programme so far has been carried out under the umbrella of centralised planning in Beijing.

Some private sector power projects initiated by such Hong Kong-based groups as Hopewell Holdings in the late 1980s and more recently Cheung Kong Holdings, China Light & Power and New World Development Corporation, in collaboration with Chinese partners, have given the expansion plan some momentum, particularly in the commercially-driven southern provinces.

But the long-expected influx of foreign independent power producers (IPPs) is still on hold, pending China's announcement of a clearly-defined framework for build, operate, transfer (BOT) projects and introduction of satisfactory safeguards for investors in foreign-sponsored projects. Progress on the so-called BOT policy is vital if foreign investors are to make a large contribution to China's power expansion programme and relieve the national treasury of pressure on funds.

Nevertheless, expansion is continuing at a fast pace, centring mainly on hydropower, such as the giant Three Gorges project; coal-fired generation, the backbone of China's capacity programme; and a nuclear power programme which is likely to be the highest in developing Asia.

The Three Gorges programme on the upper Yangtze River, the largest hydropower scheme in the world, has been in preliminary construction since late 1994. It will test China's ingenuity given the widespread protest against it by "green" groups and the clamp-down on export-import bank funding by the US and Japan.

According to Chinese officials, the project calls for 18,200MW of capacity at a high dam, to be supplied by 26 turbines of 700MW capacity each, 12 of which will be imported from foreign suppliers. The Chinese authorities say the project will cost \$28.8bn to construct, with completion estimated by 2011. The objections revolve around a multitude of environmental issues, of which the most important is the future of the 1.3m people who will be displaced by the huge reservoir. Other concerns focus on wildlife, waste water treatment, soil conservation, and deforestation.

The US Export-Import Bank said that US companies could negotiate export deals with the China Yangtze Three Gorges Project Development Corporation but they would have to do without Eximbank funding until the environmental problems were addressed. China says it will raise funds through bond issues and a surcharge on electricity tariffs elsewhere in China.

World Bank and Asian Development Bank funding is also unlikely, given their own stringent environmental concerns. Also, the two institutions are backing other hydro and coal-fired power projects in China. Last year, the ADB allocated \$200m for a thermal

despite concerns among foreign IPPs, a number of BOT projects have been approved or are under negotiation. Among the latter is the 700MW coal-fired scheme at Laibon in Guangxi province, which is now being evaluated by China's Bridge of Trust organisation after the short-listing of 10 foreign groups. A 1,000MW coal-fired project in the Shenzhen special economic zone is being negotiated by a partnership of Chinese regional power companies and Japan's Kanehama Power Company.

The AES power utility group of the US, through its China subsidiary, is building five power units with Chinese joint venture partners with a total capacity of 148MW and announced in May agreement for the installation of a 250MW coal-fired complex in Henan. And earlier this month, Taiwan's Formosa Plastics Corporation announced a preliminary agreement to undertake a

giant 3,600MW coal-fired complex with the Fujian provincial government. Several unusual financings have also taken place. Standard Chartered Investment Bank of Hong Kong recently secured underwriting for a \$124m term-loan facility for the Shanghai Zhadian Gas Turbine Power Generating Company. Standard said the loan was being financed without a Chinese bank guarantee that the local currency debt service payments will be convertible into hard currency. The funds back a 400MW thermal power project involving an international partnership.

Japan's Export-Import Bank is negotiating \$1.2bn financing for a 1,820MW coal-fired complex in the Zhubai special economic zone. The joint venture project involves a local utility and Hutchison Whampoa and Cheung Kong of Hong Kong. The author is editor of Power in Asia, an FT energy newsletter.

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■ Eastern Europe: by Anthony Robinson

## Demand is rising rapidly

The emphasis for the rest of this decade at least will be on retrofitting and upgrading existing plant and completing projects

Energy demand is rising rapidly again in eastern and central Europe as industrial production and real incomes recover from the cruel battering both received in the immediate aftermath of the collapse of the region's wasteful centrally-planned economies.

This is good news for the power generating industry, but even more so for those companies who specialise in revamping and modernising existing plant and/or in reducing the high levels of both waste and environmental pollution which characterised both power generation and heavy industry generally in the communist period.

Capital on the scale required to scrap and rebuild power stations and generating equipment in the region to modern standards is simply not available. There are so many competing demands for scarce investment resources and still so little in the way of domestic capital formation. So the emphasis for the rest of this decade at least will be on retrofitting and upgrading existing plant and completing projects, including several nuclear power generating schemes, which were started in the 1980s but moth-balled after 1989.

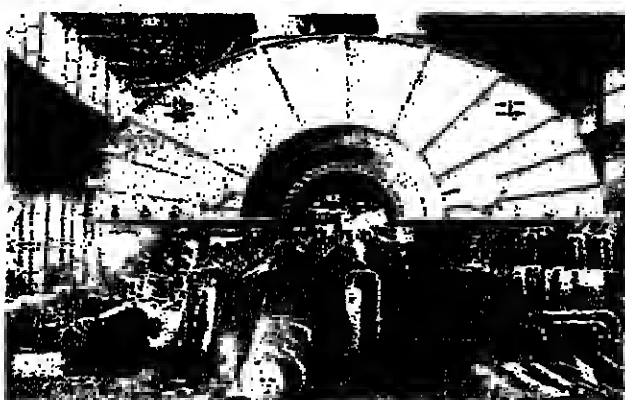
The most controversial of these completion projects is the Mobyvo nuclear plant in Slovakia whose completion was blocked by lack of funds under the old regime and then by opposition from neighbouring Austria and a dispute with the European Bank for Reconstruction and Development.

The EBRD was only prepared to help finance completion if it was undertaken by western contractors to full EU safety standards. The Slovaks balked at the conditionality, and the cost, and opted instead for a cheaper version involving Czech constructors and Russian as well as western technical assistance.

The Czech republic took a

more conciliatory, and expensive line, by awarding the main contracts for completing the Temelin nuclear plant to Westinghouse of the US. But in both cases the arguments for completing the two Soviet-designed plants were couched in ecological as well as economic terms.

Completion of Mobyvo will allow the closure of older, and more risky, Soviet plants in Slovakia. The energy output from Temelin will enable the Czech government to phase out the highly polluting lignite-fired power stations in northern Bohemia and elsewhere which have created an ecologi-



Completion of Mobyvo will allow the closure of older, more risky, plants

cal wasteland and grave health hazards downwind of them.

Until now, nuclear and hydro power plants have been seen largely as alternatives to the conventional coal or lignite-powered stations which still provide well over 90 per cent of Poland's energy production, for example, and well over 60 per cent of base energy output in most other states of the region. In the 21st century, however, it is likely that an increasing proportion of power generation in the region will come from highly efficient and environmentally friendly gas-fired combined cycle generating plants as in western Europe and elsewhere.

Some of the gas will be home produced. Both Poland and Ukraine, for example, are believed to have substantial indigenous natural gas resources and virtually unlimited potential for coal gasification. But much of the gas for future generating and other purposes will come from north-

ern Siberia and central Asia via two new high-capacity gas pipelines currently under construction.

The huge potential demand for new and upgraded power stations and generating equipment in east and central Europe, and the availability of cheap, skilled engineering workers, has also proved a magnet for the big multinational power generating equipment manufacturers.

The eastward march has been led by Asea Brown Boveri (ABB) which was the first to spot the potential and back its hunch with money and resources.

Such a combination is particularly interesting for countries such as Poland, which has turned its back completely on nuclear power and is struggling to support its large coal industry, and the Czech republic and Ukraine which are also large coal producers. Faced with the huge cost of fitting conventional wet flue gas desulphurisation (FGD) scrubbers, the Czech republic opted instead to retrofit Nalco-Fuel-Tech's low-cost simultaneous "Sox, Nox and particulate reduction" system which, according to FuelTech, has a capital cost of only \$5-\$20 per kilowatt, compared to \$175-\$350/kW for conventional wet FGD technology, and much lower running costs.

But the biggest market for such technology is Poland where FuelTech estimates that about 780 boilers of all descriptions, from power and district heating plants to cement and metallurgy plants and waste incinerators, are suitable for retrofitting.

A pilot scheme at a heat and power plant at Legnica in south-west Poland is ready to come on stream in the autumn. It is being closely watched by the nearby Polska Miedz copper refinery and other high energy producers and generators seeking lower costs and higher efficiency without large-scale capital outlays.

cheap and effective retrofitting technologies, especially those capable of reducing waste and pollution and raising efficiency.

A prime example is Nalco-FuelTech, a joint venture between Nalco of the US, the world's biggest specialty anti-pollution chemical producer, and FuelTech, which is based in London but registered in the Dutch Antilles.

The company's combined technology system reduces sulphur dioxide, nitrogen oxide and dust emissions from power stations, boiler houses and other combustion plants by relatively simple and retrofitable technology which is easy and cheap to install and maintain. It works by injecting a cocktail of chemicals into flue gases. The process not only cuts emissions dramatically but also allows the power generator to use cheaper, lower-quality coal.

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■ Russia: by John Leslie

## Reforms start to take effect

The rate at which demand recovers depends upon general economic reforms and further restructuring within the industry

The sheer scale of the Russian generation system could have been expected to generate billions of dollars of orders for western suppliers, especially given the lack of investment in the system in the 1980s. However, the level of orders has only relatively recently begun to pick up as the effects of reforms in the sector begin to take effect.

The system still has many flaws and inconsistencies allowing some domestic companies to generate high levels of profits while others struggle with lack of capacity, debts and ageing plants. As western investors gradually increase their exposure, the scope for the contracts looks set to grow as well - especially given the scope for huge efficiency savings through the application of modern technology to existing plants.

The Russian electricity sector is dominated by the joint stock company Unified Electrical Power System of Russia (RAO EES Rossi) and some 72 regional distribution companies (energos). Responsibility for the country's nuclear generation capacity is with Rosenergoatom.

The Russian generation system, consisting of 600 thermal plants, more than 100 hydro facilities and nine nuclear plants, has a total capacity of 212,000MW. RAO EES controls most thermal plants over 1,000MW and hydro plants over 300MW, representing 43,000MW or 18 per cent of generation capacity. Nine power plants are leased by the company to local energos which are important generators in their own right, owning about 135,000MW of capacity.

In the past few years, Russian electricity demand has decreased steadily, mainly due to reduced industrial activity with total supply declining from 1,077TWh in 1990 to 851TWh in 1994.

recovery depends upon general economic reforms and further restructuring within the industry. Household tariffs remain lower than industrial tariffs, the opposite to the situation in most Organisation for Economic Co-operation and Development countries, and tariffs vary by region so that the relationship between costs and prices remains clouded.

In addition, "there is enormous potential for electricity savings in Russia," according to the International Energy Agency (IEA) mainly through efficient pricing policies, improving standards of electrical appliances, demand side management programmes and increased availability of energy efficient technology. According to the IEA, estimates of the annual demand reduction potential range up to 30TWh.

The uncertainty over demand levels makes planning capacity replacement even more complicated. However, irrespective of future demand levels, the age of much of the country's plants means that 40,000MW of existing capacity will have exceeded its design life by the year 2000. While capacity replacement throughout the 1980s was around 5,000MW a year, this slowed in the 1990s with only 700MW replaced in 1992 and 2,400MW in 1993.

Under the old system, the federal budget financed capital investment but with reforms the system now has the responsibility itself. Serious financial difficulties caused by non-payment, inflation and various flaws within the tariff system meant that investment financing dried up, leading to the establishment of investment funds by RAO EES and the energos in 1992.

According to the IEA, there are considerable disparities in profitability of the energos by region and by enterprise. These arise from differences in fuel costs, demand characteristics, the structure of the local market and inherited welfare obligations. There are also regional disparities in terms of capacity which allow some of the energos to generate healthy profits by selling excess generation to the grid to cover the shortfalls in other regions.

The investment funds of the

companies involved in the sector have now become the principal source of funds for new generation capacity and other requirements. Restructuring in the sector has enabled the companies themselves to assume more responsibility for investment decisions. Some 75 per cent of the total thermal and hydro capacity was placed with the energos and, in another phase, 51 per cent of each company's shares were distributed to local authorities, management and staff and to voucher holders via auctions.

Forty-nine per cent of the shares in energos are controlled by RAO EES. While the majority of shares in RAO EES are still held by the government, the privatisation process has enabled companies in the sector to raise money abroad and allowed foreign investors to obtain stakes.

The largest energo, AO Mosenergo, which supplies the Moscow region, is in a relatively sound financial state.

### ABB achieved sales of \$350m in Russia in 1994

This is reflected in the fact that some 19 per cent of the company is held by foreign investors, according to Salomon Brothers, the company's advisors.

Salomon was the sole manager for a \$2.5m private placement of American Depository Receipts last year, the first ADR offering for a Russian company which opened the company to US mutual funds and other regulated investors.

In terms of size, AO Mosenergo is only second to RAO EES with installed capacity of 14,478MW which generated 22.3TWh in the first quarter of this year. In the first quarter, the company sold 13.5TWh of electricity to local customers in the Moscow region and 4.5TWh to the national grid wholesale market. Sales in the first quarter totalled Rb3,614.5bn, generating net profits of Rb1,040.3bn.

This level of revenue allowed the company to maintain its rate of construction despite what it describes as a sharp

increase in construction costs and an increase in non-payments. The company was therefore able to commit some Rb575bn to capital investment in the first quarter of the year, of which Rb331.2bn came from net profits. The success of such companies has allowed western companies such as ABB, Siemens and IVO to attain a gradual increase in orders from Russia after a slow start. Most of this work is carried out through joint ventures between the western companies and established Russian manufacturers of equipment.

ABB achieved sales of \$350m in Russia in 1994 and has established 19 joint ventures there. In March this year it announced it had won a \$100m contract from Omskenergo to help refurbish the company's HPP-3 plant in co-operation with Russian companies.

One area that is likely to figure highly is the expansion and refurbishment of cogeneration capacity. Some 80 per cent of Russian generation capacity is thermal, mainly fuelled by gas because of the country's abundant supplies, of which half is in the form of combined heat and power plants. Russia has the largest cogeneration capacity in the world and one of its largest markets is likely to remain that for modern, efficient gas turbines for enhancing these plants.

According to German electrical and electronics group Siemens, the application of modern, combined-cycle technology at existing heating-only plants offers an energy conservation potential of about 15-25 per cent compared to present levels of consumption - representing potential gas export earnings of DM65n a year. Since 1992, RAO EES has ordered Siemens-hull units for St Petersburg, Dzerzhinsk and Omsk which are being built by the LMZ-Siemens joint venture Interturbo.

However, the pace at which it and other generators in the Russian market can continue to do so will to a large extent depend upon the implementation of further reforms within the electricity market and the pace at which this happens remains a matter dependent on the outcome of other variables, including the presidential election.

Can you put up a power transmission system without annoying your neighbors?

Economic development and environmental conservation are often seen as natural enemies. But by taking environmental considerations seriously early on in a project, ABB keeps any impact to a minimum. For

example in southern Africa, ABB was asked to erect 410 kilometers of transmission lines without disturbing an indigenous colony of Cape vultures. The project was executed with minimum disturbance during the breeding season between April and September. It is somewhat surprising therefore that this neighborly respect did not slow down the project.

In fact planning ahead combined with local knowledge and advanced technology meant the Zimbabwean section of the Matimba Bulawayo interconnection was completed ahead of schedule.

ABB is committed to the core principle of sustainable development. Balancing mankind's needs with those of a delicate environment takes foresight and efficient, ecologically sound technology. This is what ABB offers to neighborhoods all over the world.



## 4 POWER GENERATION EQUIPMENT

Finance: by Stefan Wagstyl

## Considerable challenges

Lenders have been willing to take the risks in return for an extra premium over the rates of interest earned on corporate loans

Just as independent power producers are building an ever-increasing share of new power stations, so financial companies are developing ever more sophisticated ways of funding their projects.

Traditional utilities, whether state-controlled or privately-owned, still account for the bulk of orders for new schemes. They usually raise funds from their own resources, or through bank loans secured by their balance sheets. In the case of government-owned utilities, these can be guaranteed by government guarantees.

But Independent Power Producers (IPPs) are multiplying rapidly and now account for 30 per cent of the market for new power plants, compared with less than 5 per cent 10 years ago. They are spreading from the US and the UK, where they

first developed following deregulation, to other countries, notably developing nations in Asia, which need private finance to help fund fast-growing electricity needs.

The expansion of IPPs is attracting a strong band of banks and securities companies into the market for financing schemes, principally through project finance. The complexity of the financings - and the commercial and political risks attached to many schemes - mean the challenges involved in financing are considerable. But so, equally, are the potential rewards for the houses which construct effective packages.

The commercial banks active in the market include institutions in the US such as Chase Manhattan Bank and Citibank and in the UK, including National Westminster Bank and Barclays Bank. Investment banks in the field include Morgan Grenfell, a subsidiary of Germany's Deutsche Bank, and JP Morgan, Goldman Sachs and Morgan Stanley of the US.

Mr Jeremy Wilson, a vice-president at JP Morgan says: "The trend is for a huge increase in demand for project finance." Mr Bob Mabon, man-

aging director of structured finance at BZW, the investment banking arm of Barclays, says: "You are seeing a spread of project financing structures from the US and the UK to developing countries."

The main challenge in financing a power station project directly, instead of lending to the utility or company which owns the plant, lies in managing the risks involved.

Typically, a power development company organises a consortium to invest equity in the scheme, which may account for 25 per cent of the total cost. The consortium often includes the power equipment supplier, which contributes capital in return for plant orders. The remaining 75 per cent of the project is normally financed by banks.

Usually, a power station can only be financed in this way if there is a firm agreement from a utility to buy its output - the power purchase agreement.

The main risk is that the finance is tied to a single scheme: if it goes wrong, the creditors have no access to other assets or to the assets of the equity investors in the project. Nevertheless, the role of electricity generation at the

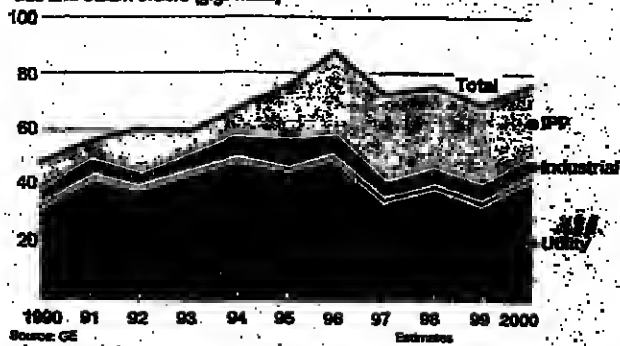
core of economic activity has given the industry a reputation for extreme stability of earnings. So, initially in the US in the 1980s, and later in the UK, lenders have been willing to take the risks in return for a premium over the rates of interest earned on corporate loans.

Even in developing countries with high political risks, developers have not found it difficult to secure equity for schemes, especially if a top-class equipment supplier supports the project. The attraction is the high rates of return available if the project goes well - ranging from 15 per cent in the US to 20-25 per cent in developing countries.

But loan finance has been harder to put in place, mainly because banks are obliged to take more account of the potential risks than developers and because banks are reluctant to tie their funds up for too long. The last consideration is important in power station finance because plants have long lives - typically 25 years or more. Ideally, the borrowers would like to spread loan repayments over this time, but banks are not eager to lend for more than 10 or 15

### Market shift to Independent Power Producers

Gas and steam orders (gigawatts)



years. The solution has been to finance a project for the first 10 years and refinance it later, often after construction is complete. But in the past five years, financiers have increasingly looked to bonds - with issue lives of up to 25 years - to close the financing gap.

Starting with private placements, the market developed rapidly in the US. In 1993, the first IPP bond was listed on a stock exchange, under the limited terms of rule 144A of the Securities and Exchange Commission. This issue, by Siba Energy for a 1,000MW scheme at Scriba, New York state, paved the way for a host of other North American IPP bonds. In Britain, the market has developed more slowly but has more than kept pace with the US in financial innovation.

In January this year, First Hydro, the pumped storage business of the National Grid, was bought by Edison Mission, the US energy development company, for \$635m. Some \$400m of the purchase was funded by 25-year sterling bonds issued by First Hydro, with no recourse to Mission. BZW, the lead manager, says the issue broke new ground because First Hydro has no long-term power purchase agreements with electricity distributors.

Pumped storage is a special case. Mr Mabon believes that the next challenge will be the financing of merchant plants - thermal power stations with no power purchase agreements, selling electricity on short-term contracts to utilities.

In developing countries, non-recourse bonds for project finance are only just beginning to make an impact on power generation. Their development was interrupted by the 1995 Mexican debt crisis, which saw many US holders of Mexican bonds selling their paper and cast a shadow over finance for developing countries in general.

In China, potentially the largest market for IPPs in the developing world, the first IPP scheme has yet to be completed. The Chinese government and would-be developers have still to resolve important issues, including rights of ownership of power stations. Export credit guarantee agencies - such as the US Export-Import Bank and Germany's Hermes - have also to finalise their policy towards financing IPP schemes in China.

In India, only two IPP schemes have seen their financing completed - the politically controversial Dabhol project in Maharashtra state and the Gujarat Torrent scheme in Gujarat. Other projects have been delayed by arguments over state guarantees and power purchase agreements.

However, other countries have brought many more schemes to fruition, including Malaysia, Indonesia, and Pakistan, which has about six IPP schemes. Investment banks believe that the Paki-

stani schemes are particularly significant because the projects have been funded despite the general perception that Pakistan is a politically unstable country with high risks for investors. The schemes have been completed because they have been strongly supported and pushed through by the central government on terms attractive to investors.

Elsewhere, the most significant financing has been for Jawa Power, a \$1.7bn coal-fired plant at Paton, east Java, on the site of an existing power station. The developers, led by Siemens of Germany and the UK's PowerGen, together with JP Morgan, their financial adviser, have put together a package of equity and loan finance which includes \$200m of bonds placed privately with US institutions.

Mr Tim Leissner, a vice-president of JP Morgan, says this is the first time such bonds have been issued for a power project in an emerging country before the plant was built and with no guarantee of completion from the developers.

Mr Wilson says the next step will be the opening up of the rule 144A market for developing country schemes. Because many US institutional investors can only buy publicly-traded instruments, such a development would give developers access to billions of dollars of savings.

Servicing: by Stefan Wagstyl

## Better profits to be made

Liberalisation of the power industry and the development of independent power producers has changed the nature of the service business

For power engineers, the ultimate professional satisfaction may still lie in building a big new state-of-the-art plant from scratch. But for power engineering companies, better profits are increasingly to be made from the more mundane business of servicing and renovating existing plants.

The intense competition for contracts for new power stations in the 1990s has driven plant suppliers to expand their service business. At General Electric, for example, service now accounts for just over half the \$4bn revenues of the power systems division, compared with one third

five years ago. The (undisclosed) share of profits is even higher.

GE benefits enormously from having the largest installed base of turbines of any producer. But others are not far behind. At Westinghouse, service's share was about 50 per cent of sales of \$3bn. At ABB, the figure last year was about 20 per cent of the \$10.3bn turnover in power generation.

Mr Armin Meyer, who runs ABB's power business, says: "Service revenues are growing faster than new business. And if you do a good job, you can get a nice margin."

Mr Ernie Gault, vice-president for service and parts at GE, says: "It is not just a question of selling spare parts. It is all about getting much closer to the customers and helping them to develop solutions to their problems."

The expansion of their service businesses by the big plant suppliers has increased the competition for smaller specialist service companies. But the market as a whole has increased because power station operators are demanding higher

levels of service, partly in response to commercial pressures and partly because of technological changes which have created new opportunities in servicing.

The main shift in the market which has changed the nature of the service business has been the liberalisation of the power industry and the development of independent power producers.

Before deregulation, state-owned utilities typically bought high-specification power stations with a service life of 30 years or more and employed teams of in-house engineers to service their plants with parts purchased from the original equipment supplier.

In today's increasingly liberalised markets, new independent power producers and old-established utilities alike are having to be more cost conscious. They are less likely to demand ultra long-life components, preferring to spread their costs over the life of a plant by spending more in later years on servicing.

Many operators have also reduced in-house service teams to save money,

finding it more economical to outsource such services.

At the same time, the arm's-length relationship between plant supplier and customer is being replaced by closer ties. Plant suppliers are being asked to invest in projects and sometimes play a role in its management long after construction is finished in build-operate-transfer and build-operate-own agreements with utilities.

The growth of independent power production in developing countries has added further demands for service skills, particularly in sites with little indigenous technical know-how.

With funds for new projects at a premium, there is also an increasing need for raising the efficiency of existing plants by improved servicing.

These changes in the market place have coincided with the rapid spread of computer-based technologies, which have allowed companies to develop increasingly sophisticated services.

By constantly monitoring turbines and other equipment in action, operators are able to develop a continuous picture of a plant's technical strengths and weaknesses. Instead of having to wait for a

break-down, operators can carry out preventative work in advance. They can also time routine maintenance more accurately, varying the intervals for different plants.

Manufacturers can take this monitoring one step further. By accumulating performance data from plants at different sites, even in different countries, they can build an extensive library of operating information.

### New technology permits development of remote-control servicing

tion, allowing the development of even more sophisticated service packages.

New technology is also permitting the development of remote-control servicing. Specialist engineers in service centres can use modern telecommunications links to gather data and transmit possible solutions to problems without ever visiting the power station.

For power plant suppliers, the first fruits of these changes came in the late

1990s, but they are multiplying rapidly now. GE, for example, has long-term operation and maintenance contracts for 13 plants, where GE staff run plants for customers for a fee based on performance. At 12 other plants the company has installed sophisticated monitoring kits to check the long-term performance of its turbines. Twenty more are in the pipeline.

ABB has signed a long-term agreement with Commonwealth Edison, the US utility, under which it is committed to raise the reliability and profitability of four plants. It will be paid from a share of the savings.

Mr Gault at GE forecasts a global web of computer, voice and video links in which engineers will easily exchange information and profit from each other's experiences.

"The business will be able to respond more effectively and more quickly to customers," he says.

These developments will not necessarily exclude the specialist service companies. They tend to be cheaper than the big plant suppliers. They also claim they respond more rapidly. However, they may find it increasingly difficult to compete with the plant suppliers' ability to offer integrated long-term service packages.



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**Nuclear fusion:** by Clive Cookson

# Encouraging research results

Europe lies somewhere between Japan and the US in the availability of funding for fusion projects

The political climate worldwide is becoming less hospitable to the expenditure of vast sums of public money on energy projects whose commercial pay-off lies at least 40 years in the future. As a result, the prospect that nuclear fusion will make a significant contribution to the world's energy supplies by the middle of the next century is receding.

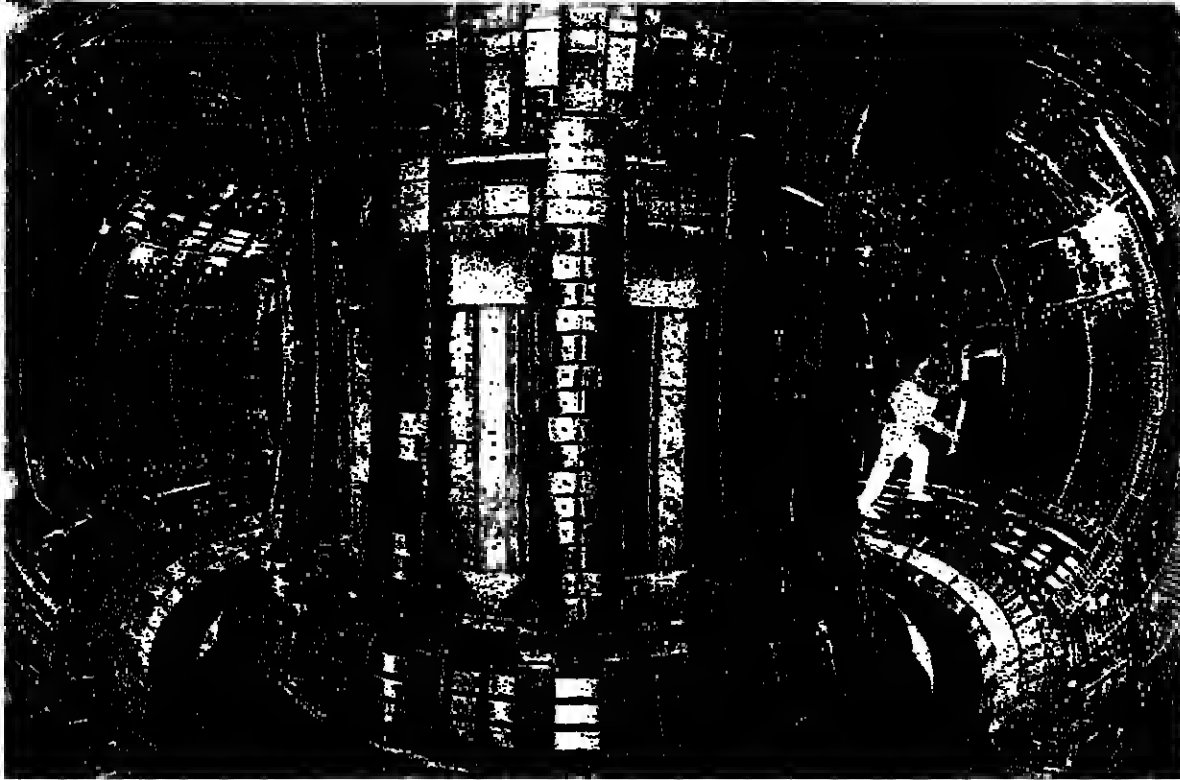
Nothing has happened on the technical front to speed the scientific case for fusion: that in the long run the best technology for generating electricity cheaply, cleanly and on a large scale is to replicate the power of the sun on Earth. This means the controlled release of energy through fusing together the nuclei of very light atoms - as opposed to today's nuclear industry which splits heavy atoms.

On the contrary, recent research results from fusion experiments - notably the Joint European Torus (JET) at Culham in Oxfordshire and the Tokamak Fusion Test Reactor at Princeton, New Jersey - are encouraging. Both JET and TFTR have generated brief bursts of fusion energy in a superheated gas "plasma" within their doughnut-shaped reaction vessels; analysis shows that the plasma was heated by the release of energy in the way that would be required to sustain a reaction in a commercial fusion reactor.

JET and TFTR are themselves large and expensive projects, costing several hundred million pounds each. But the next stage, the International Thermonuclear Experimental Reactor (ITER) that would demonstrate the technical feasibility of fusion as a large-scale energy source, has an estimated price tag in the \$6bn to \$10bn range. ITER would generate 1,500MW of power - as much as today's largest nuclear plants - for periods of up to 30 minutes.

Engineers from the European Union, US, Japan and Russia started designing ITER in 1992 as a global project. Their work is scheduled to finish in 1998. Then the hard bargaining will begin, over the location and funding of ITER.

The US government is cutting back particularly hard on its support for fusion; there may not even be enough money to keep the Princeton TFTR running after next year. So the prospects of the US putting a lot of money into ITER look slim. On the other hand, Japan - which remains strongly committed to long-term nuclear research and develop-



Inspecting the interior of the JET vacuum vessel. Last month, the EU agreed to extend the JET project until the end of 1999. Picture courtesy of JET

ment - has suggested informally that it might be prepared to meet most of ITER's costs, if the other participants accept a Japanese location for the project.

Europe lies somewhere between Japan and the US in the availability of funding for fusion projects. Last month, the EU agreed to extend the JET project, which had originally been scheduled for closure at the end of this year, until the end of 1999.

JET recently completed a nine-month shut-down, during which its "divertor" (exhaust system) was changed to improve the reactor's operational capacity. A series of experiments later this year and next year will use, for the first time, the 50:50 mixture of deuterium and tritium (isotopes of hydrogen) that is optimum for fusion.

So far, most JET experiments have been aimed at learning how to confine and control a plasma at temperatures above 100m°C rather than to achieve fusion. They have used only deuterium, because this does not make the reactor vessel radioactive.

In 1991, however, 10 per cent of tritium was added to the deuterium. This produced significant fusion power - peaking at 1.7MW and averaging 1MW over two seconds - and provoked ecstatic newspaper headlines about science taming the power of the sun. JET

researchers expect the 50:50 mixture to generate 10MW of fusion power over several seconds but it will not achieve the "ignition" point at which the reaction becomes self-sustaining.

At the same time, Euratom, Europe's co-ordinating body for fusion research, has agreed funding for two smaller new machines. One is the Wendelstein 7X "stellarator" in Germany. The stellarator is an alternative containment vessel to the tokamak used for TFTR and JET. It holds the plasma in place solely with a magnetic field generated by external coils, while the tokamak uses the plasma itself to generate a current and hence a further magnetic field.

The other new machine will be the Mega Amp Spherical Tokamak (MAST), to be built close to JET at Culham. It will develop the idea that a round tokamak can give better results than the doughnut-shaped Tokamak.

So far the vast majority of funds for civil fusion research have been devoted to "magnetic confinement" projects. Magnetic fields are used to hold the plasma in place and prevent it touching the reactor walls, because no materials can withstand temperatures of millions of degrees. But some scientists believe that a radically different approach to fusion - inertial confinement - deserves more attention. Here, a powerful laser

or ion beam is used to compress a tiny pellet containing deuterium and tritium so fast that the fusion is complete before the plasma can expand and extinguish the reaction.

An inertial confinement reactor would generate power by burning a steady succession of pellets, each weighing no more than a few milligrams. The process would be like exploding a series of miniature H-bombs once a second - and indeed most inertial confinement research was a classified military secret until the 1990s because its main application was to develop nuclear weapons.

Now that inertial confinement is being declassified, it is attracting interest as potentially a more flexible and cheaper alternative to the multi-billion-dollar reactors that are likely to be required for generating fusion power through magnetic confinement. But no serious engineering design work has yet been done for a possible inertial confinement reactor.

With these new possibilities opening up - and possibly offering budget-conscious politicians a good reason to postpone making a decision on ITER - it seems likely that fusion will continue to justify the critics' old quip that its commercial reality always lies about 40 years in the future.

**Nuclear power:** by Simon Holberton

# Focus is on the east

The prospect of a new nuclear station being built in North America or western Europe is remote

In this 10th anniversary year of the Chernobyl catastrophe in the Ukraine, the world's nuclear power industry is doing a little better than might have been expected.

The understandable nuclear allergy which the Chernobyl disaster produced seems to have had only muted effect on the plans of governments to install nuclear power stations.

At the end of 1995, according to the International Atomic Energy Agency, the Vienna-based international nuclear watchdog, there were 39 nuclear reactors under construction for the generation of electric power.

If all were completed this year - which they will not be - their collective output would be equal to 10 per cent of installed capacity of the world's 437 nuclear power plants currently operating in 30 countries.

These have a design capacity to generate 343,793MW of electric power; reactors under construction will add 32,594MW.

The aggregate figures disguise, however, a pattern of future power station development skewed towards the Far East. The prospect of a new nuclear station being built in North America or western Europe is remote.

Westinghouse, for one, sees little hope of new orders in the US or western Europe before 2005.

It believes that even France, western Europe's leading proponent of nuclear power, is at the limits of nuclear development with 76 per cent of electric power generated by nuclear plants.

However, Siemens, the German manufacturer, has developed with Framatome of France a European pressurised water reactor (EPR) which Electricité de France plans to use for the replacement of decommissioned plants.

But, underlining the straitened times in the industry, Siemens has seen nuclear power's share of its business change from 70 per cent of equipment sales to 30 per cent of sales today.

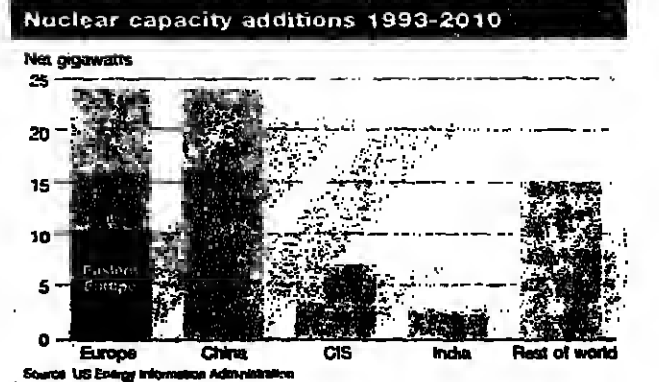
In the west, the issue is one of maintenance and plant life extension. The biggest factor in the profitability of a plant is availability. Reducing the time a power station is out of action has become a key concern of operators.

Westinghouse believes it can cut operating costs by 20 per cent by reducing "outages" for maintenance. Traditionally, outages used to be planned 90 days ahead of shutdown;

The main opportunities are in China which alone has plans for 20 1,000MW plants. It currently has installed capacity of 2,300MW, mostly located at Daya Bay in Guangdong.

China's coastal regions remain the likely sites for future development. Most of its massive coal reserves are located in remote inland areas and is difficult to transport to the more economically vibrant coastal areas.

Taiwan is also pushing ahead with nuclear power development. In May, Taiwan



Source: US Energy Information Administration

increasing the planning process to a year can shorten the period of outage.

So, too, can changes in work practices. Ten years ago, maintenance used to consist of separate packages of services for pumps and line, another for fuel, and so on. Now Westinghouse offers an integrated package with cross-skilled workers performing more than one maintenance task.

This has led to a 20 per cent cut in man days expended on an outage. In all, outage times have been cut from 80 days to 30 days.

In terms of new power station orders, manufacturers are looking to eastern Europe, the former Soviet Union, and Asia as the market which will drive the industry forward.

Siemens has signed a memorandum of understanding to build a 640MW pressurised water reactor near St Petersburg. The company is also active in advising on maintenance and safety in Russia and eastern Europe.

Power Company (Talpower), the state electric utility, awarded a contract for two reactors and related equipment to General Electric of the US. The GE bid of \$1.8bn beat competition from ABB's US subsidiary, Combustion Engineering, and from Westinghouse of the US, which teamed up with Nuclear Electric, a subsidiary of British Energy of the UK.

Japan wants to build new plant but has put further development on hold in the wake of the Kobe earthquake and problems with the Monju fast breeder test reactor.

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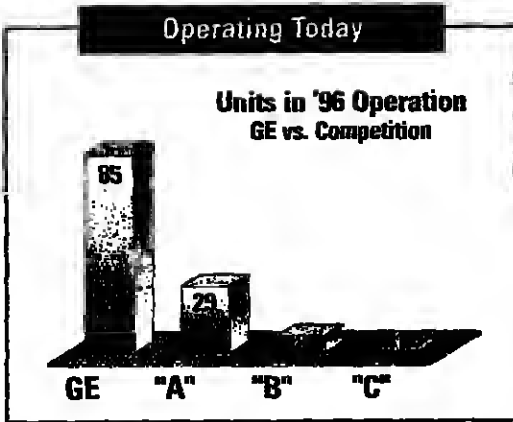
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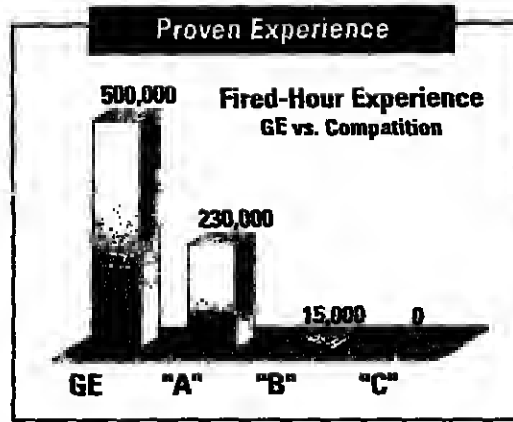
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GE Power Systems



## 6 POWER GENERATION EQUIPMENT

Aeroderivatives by Andrew Baxter

## Increasingly popular

The industrial rationale for using aero-engines for land-based power generation is powerful

Some aero-engines never get off the ground. Instead, their efficiency and reliability are making them an increasingly popular option in land-based power generation for combined cycle outputs up to about 120MW.

While the aviation market is obviously the most important for aero-engine producers, modified versions of their machines have been sold to power producers since the 1950s, and to the oil and gas industry for both power generation and mechanical drive applications for nearly as long.

In the UK, Rolls-Royce - pioneer of the market for aeroderivative gas turbines - used to sell packages to the old Central Electricity Generating Board for use as occasional "peaking" plants, says Mr Bob Sunerton, managing director of Rolls-Royce Industrial & Marine Power.

Elsewhere, North Sea oil and gas producers, for example, appreciated the machines' light weight, quick start-ups and the supply of "a lot of power from a small package." The industrial rationale for using aero-engines for land-based power generation is powerful.

It cost General Electric of the US more than \$1bn to develop its CF6-80C2 aircraft engine, an investment which would be very unlikely for an industrial machine, says Mrs Lorraine Bolsinger, general manager for marketing at GE Marine & Industrial Engines. GE M&I's

biggest gas turbine, the 44MW LM6000, shares 90 per cent commonality with its sister aircraft engine, allowing M&I to benefit from economies of scale and proven reliability.

"The big dollars have already been spent, and you don't want to do a lot to modify the machines for land-based power generation," says Mrs Bolsinger. The main distinguishing characteristic is that aeroderivative gas turbines do not have fans. For power generation, they are supplied hooked up to a generator, while for mechanical drive applications, the turbines drive a compressor.

The list of aeroderivative gas turbine producers is, by definition, much the same as that for aero-engines, although the priorities accorded to the market

vary. In the power generation market, GE is the biggest manufacturer, followed by Rolls-Royce. Pratt & Whitney has a much smaller presence.

However, both the two main manufacturers emphasize that this is no cosy duopoly - and indeed there is no aeroderivative gas turbine market as such. Not only do GE and Rolls-Royce compete with each other for orders, they are also battling against producers of heavy-duty or "frame"-type gas turbines which are not aeroderivatives, even if some of their design features are borrowed from aero-engines.

This is particularly the case in the larger power output categories, says Mr Sunerton, while at the smaller end of the market there is also competition from diesel engines.

Just to add to the complexity, the heavy frame "rivals" include companies closely related or at least linked to the aeroderivative producers - other divisions of GE, or Westinghouse, with which Rolls-Royce has strong links.

There is even competition within the GE aeroderivative gas turbine business, because GE sells its gas turbines through a worldwide network of original equipment manufacturers (OEMs) which package the units. This can lead to one of GE's OEMs competing for an order with another, says Mr Mark Axford, vice-president of Stewart & Stevenson International. Its parent, Houston-based Stewart & Stevenson Services, is the biggest of GE's OEM packagers.

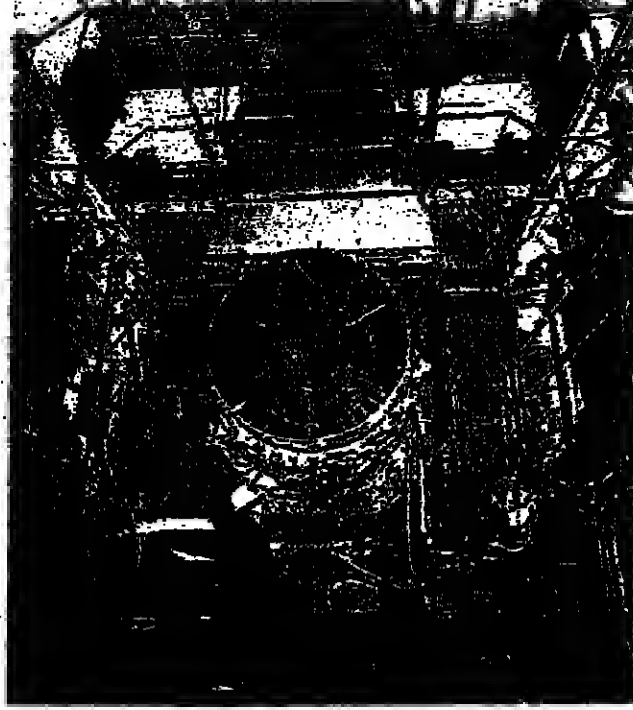
GE estimates that the mar-

ket for gas turbines in the 100MW-1000MW range is about 8 gigawatts (8,000MW) a year, or a third of the total gas turbine market. This includes oil and gas and industrial markets as well as power generation, and roughly 40 per cent of gas turbines sold in this segment were aeroderivatives. Rolls-Royce estimates that, for power generation alone, the aeroderivative gas turbine market was 1,900MW last year.

Mr Sunerton points out that the aeroderivative producers have benefited from the same factors that have propelled the heavy frame gas turbine market in the past 15 years - the ready availability of gas, its cost, efficiency and environmental profile. But, he says, there are a number of factors that are helping aeroderivatives increase their share. First, the "technology push" is with aero-engines, and new materials and cooling technologies will help them stay ahead in the efficiency race.

Secondly, deregulation and changes of regulation in the power industry are making it harder to fund large capital projects. In independent power production, for example, it is easier and quicker to put together a 100MW project than one for 600MW, whether it is sited in the US or a developing country. "The lower the value of the project, the fewer bankers and lawyers are involved," says Mr Sunerton.

These factors, along with much-improved reliability after some problems in the 1970s, are pushing aeroderivative sales forward. By combining two gas turbines with a steam turbine, the biggest power station project that the aeroderivative producers typically serve is about 120MW. As Mr Axford points out, there is no aeroderivative option at 200MW - "they don't make plants that big." But it is at the top of the aeroderivatives' power range that the competition with heavy frame



Key weapon: the first industrial version of the Rolls-Royce Trent on test

rivals is fiercest.

The customer's choice of gas turbine type could depend on the type of project, says Mrs Bolsinger. "Aeroderivatives have high simple-cycle efficiency, but very low exhaust energy - they don't make a lot of steam," she says. "So if you need a lot of steam for cogeneration, they may be a disadvantage. But if efficiency is the most important criterion, the aeroderivatives may be a better fit."

The intended operating profile is another important criterion, she says. Aero-engines are designed to be switched on or off several times a day, so aeroderivatives can be "cycled" similarly with no impact on maintenance requirements. As for the cost, the initial price for an aeroderivative package can be more expensive than its heavy frame equivalent, says Mrs Bolsinger, because the machines' ruggedness depends

more on modern materials technology than on sheer weight. But better fuel efficiency and lower operating costs can offset this over the life cycle of the plant, she says.

As part of the broader market for gas turbine power generation, the aeroderivative producers have had to weather the same pricing pressures as those faced by the heavy frame brigade. They have also witnessed a similar change in their market profile as the big opportunities shift away from North America towards developing countries.

Mrs Bolsinger says the US market for aeroderivatives is "indefinitely stalled" because of uncertainty over electricity regulation and the future structure of electricity distribution. The result, she says, is a change in customer profiles. Traditionally, only 30 per cent of GE M&I's power generation customers were international.

Now, only 10 per cent are domestic.

The best growth prospects, she says, are in Asia and Latin America, where the short delivery times for aeroderivatives - six to nine months on average - are an attraction for power-hungry customers. Last year alone, new power generation markets for GE M&I opened in countries including China, Tanzania and Ecuador.

At Rolls-Royce, Mr Sunerton says south-east Asia is probably the fastest-growing area for aeroderivatives because of its strong infrastructure growth and rising per capita incomes. But he also sees good growth prospects in both western and eastern Europe. This global pattern is expected to continue for a few years at least, although Mr Sunerton believes that the US market, while currently stagnant, will eventually regain its former importance. He also foresees slightly stronger growth prospects for aeroderivatives in power generation markets than in oil and gas or marine sectors.

Technology developments will, inevitably, follow those in the original aero-engines, although they tend to lag a few years until reliability is proven. Both GE and Rolls-Royce have managed big gains in efficiency with their largest machines, respectively the LM6000 and the industrial version of the Trent - which enters service shortly and which Mr Sunerton sees as a key weapon to help the UK company overhaul GE's lead in power generation. Both have also made progress on reducing emissions with dry low-NOx technology.

With simple cycle efficiency at 42-43 per cent, further gains may be more modest, and the next big event in the industry could be an industrial version of the new 100,000lb-thrust GE90 engine, now in service on Boeing 777s. "We're looking right now at how to develop that," says Mrs Bolsinger.



General Electric's LM6000 gas turbine on test with Stewart & Stevenson, the biggest of GE's OEM packagers

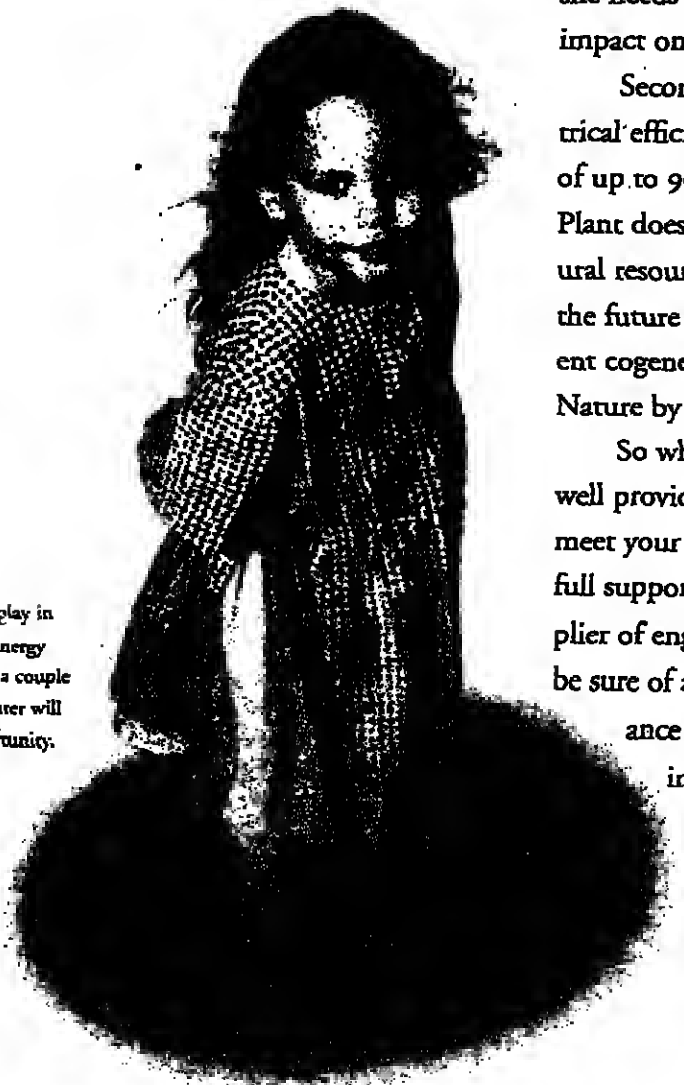
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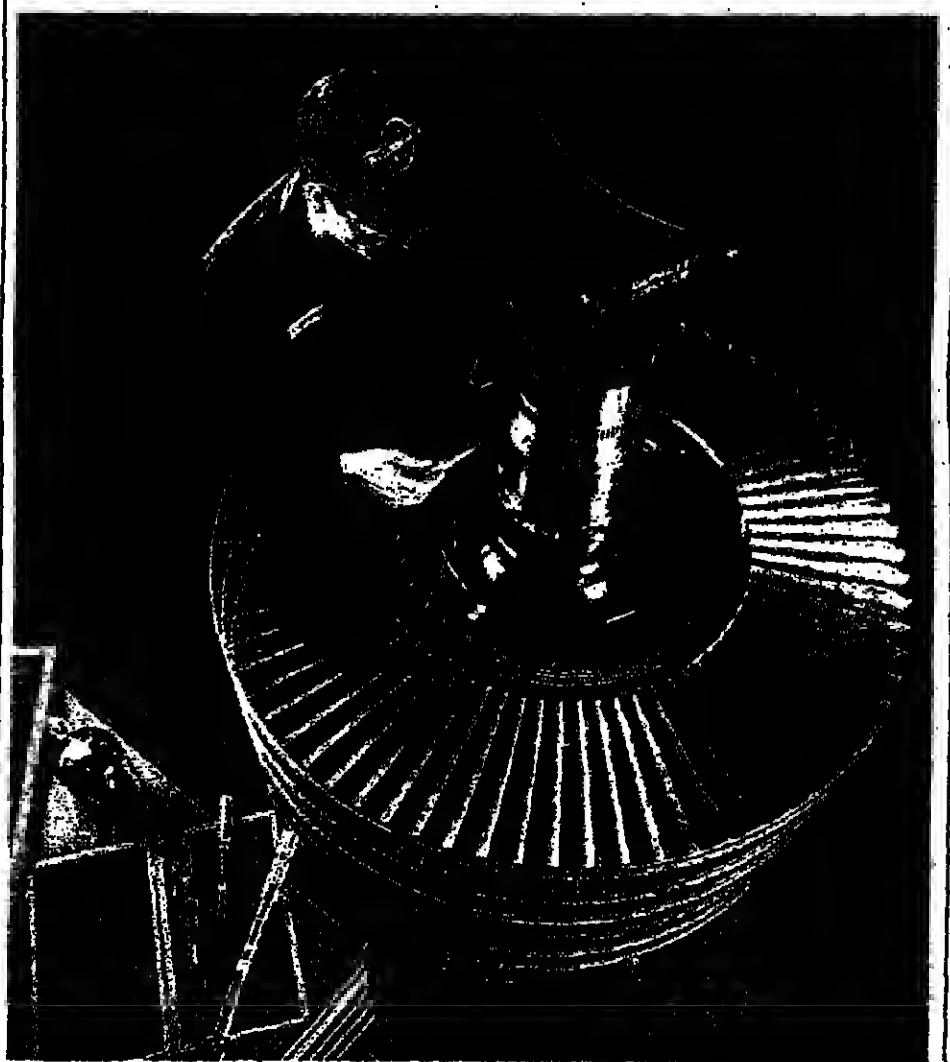
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Boeing up international sales Stewart & Stevenson build power station packages around GE gas turbines

PROFILE

Stewart & Stevenson

## International sales soar

The growing international popularity of aeroderivative gas turbines and the slowdown in the US market is illustrated by recent trends at Stewart & Stevenson Services, one of a dozen companies worldwide which build power station packages around General Electric gas turbines.

Last year, more than two centuries after Captain Cook, the company "discovered" Australia, selling five of GE's LM6000 turbines for power generation at several mining sites. It also made its first foray into Tanzania, as partner in a joint venture that brought two LM6000s on line some 160 days from the signing of the contract.

The slowdown in the US market has been caused by deregulation of the electricity business. "We saw it enough in advance to beef up international sales," says Mr Mark Axford, vice-president of Stewart & Stevenson International.

International sales have grown dramatically over the past year, says Mr Axford, and 75 per cent of new power plant packages are now destined for foreign job sites. Not all are necessarily sold outside the US, though - a recent deal to supply three units for an Euron project in China, for example, was

clinched in Houston. Stewart & Stevenson, founded in 1902, has been an authorised original equipment manufacturer (OEM) of LM gas turbines since 1978. Since then, it has sold more than 200 LM-series packages worldwide, and a total of 750 aeroderivative gas turbine packages.

Sales in its gas turbine business, which covers power generation and mechanical

drive markets, operations and maintenance, have soared from \$44m in 1986 to \$538m last year, about 44 per cent of the company's total \$1.2bn sales last year. About 90 per cent of the gas turbine business is GE-related.

Mr Axford believes the OEM concept has proved very successful, with GE concentrating on producing the turbines and the OEMs producing and selling power station packages in many different, culturally diverse markets. "We know exactly what our customers in North America want," says Mr

Axford - a package that is assembled and factory tested at full power before shipment.

This knowledge is now being used overseas. The company's PowerLease programme, developed originally for the US market, offers customers a turnkey power facility, financing, operations and maintenance.

The concept is designed to appeal to countries which are deregulating their electricity market and looking for flexible, short-term contracts. Stewart & Stevenson builds its power station packages at factories in Houston and at Rheden in the Netherlands, but in the long-term it could begin manufacturing in Asia too, says Mr Axford, to better serve customers in the region.

This year has seen a slow start for the group - weak gas turbine equipment sales contributed to a fall in first-quarter net profits to \$6.7m from \$16m a year earlier. The company said it was unable to finalise several multi-unit gas turbine projects that it had expected to close in the first quarter, but expects to book a significant amount of gas turbine business during the rest of the year.

Andrew Baxter



PROFILE Westinghouse

# A split is almost certain

Mr Fran Harvey, a senior executive of Westinghouse Electric makes no attempt to disguise the gap between the US group's traditional industrial businesses and its newly-expanded media interests.

"There is no fit. These are really two distinct businesses," says Mr Harvey who is soon to take over as president and chief executive officer of the company's industries and technology group - the traditional industrial businesses, including power generation and nuclear engineering.

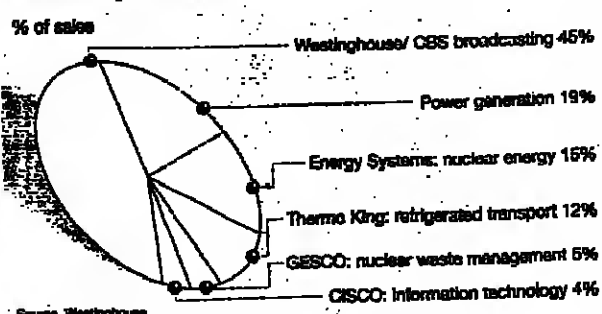
The mismatch between the two halves of Westinghouse has prompted the company to consider splitting itself into separate broadcasting and industrial businesses, as Mr Michael Jordan, chief executive announced earlier this month.

While Westinghouse has given itself until the end of the year to reach a final decision, analysts believe that a split is almost certain. It would be the culmination of the changes Mr Jordan has made since he started his effort to revitalise Westinghouse in 1993.

Mr Jordan first concentrated upon making the old-established industrial businesses more productive, reducing debts and cutting costs, including laying off 12,000 staff, a fifth of the total.

Then last year he dramatically expanded Westinghouse's broadcasting business through the \$5.4bn acquisition in November of CBS, the television and radio network. The shift in the

Present portfolio



group's centre of gravity away from manufacturing was extended with the \$1.1bn sale earlier this year of the defence equipment and office furniture divisions. Only last week, Mr Jordan went one step further with the \$3.9bn acquisition of Infinity Broadcasting, second-largest radio network in the US.

Dividing the group into two would help investors value each half more accurately and - Westinghouse believes - result in a bigger overall stock market value for the businesses. In particular, company executives think the broadcasting operations grouped around CBS would secure a better valuation if they were not encumbered by the industrial companies, with their pedestrian financial performance.

However, if the glamorous broadcasting interests are spun off, the future of the original core Westinghouse industrial operations seems less than clear. Many financial and industrial analysts believe the obvious conclusion will be the

break-up and sale of the industrial operations - including power engineering - to separate buyers.

But Mr Harvey, who earlier this year turned down an offer to leave Westinghouse and join Northrop Grumman, the defence division's new owner, says disposals are not on his agenda. "I didn't come back to Westinghouse to break it up and sell it. My mind is set on profitable growth."

However, he adds that disposals are not completely ruled out. "You can never say never," he says.

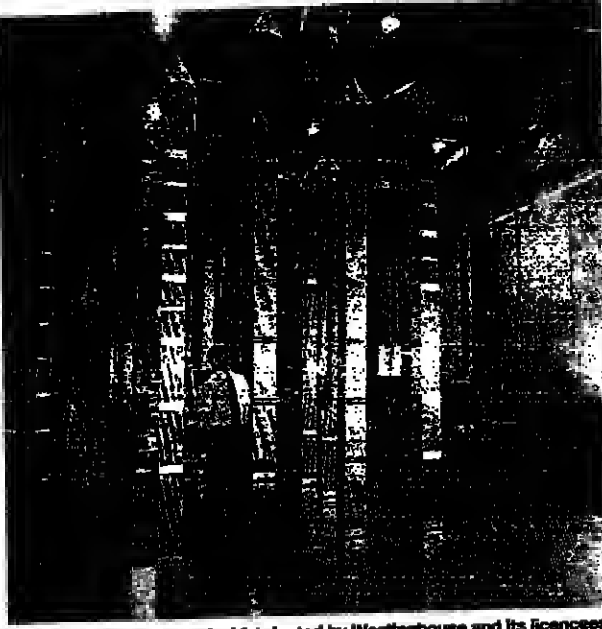
Mr Randy Zwirn, executive vice-president in charge of power systems, uses almost the same words. "We

are not trying to sell our business. But you can never say never."

Such qualified denials are unlikely to quell speculation about Westinghouse's future role in manufacturing, including power engineering.

However, whether or not the business is eventually put up for sale, Westinghouse remains firmly committed to its development. Mr Zwirn says he is investing about \$100m a year and is spending an extra \$100m on a key joint venture in China - with the Shanghai Electric Company, China's largest power equipment maker. "I have access to all the capital I need," he says.

Rival manufacturers concede that Westinghouse's power systems business is now in better competitive shape than it has been for more than a decade. It is overcoming the effect of years of neglect before 1990, when it failed to keep pace with technological change, notably the development of gas-fired turbines, which soared in popularity at the end of the 1980s. The company's current resurgence dates back to 1988, when a team of executives from the highly successful nuclear business - which



Core operation: nuclear fuel fabricated by Westinghouse and its licensee

pioneered the commercialisation of the pressurised water reactor - moved to the (non-nuclear) power generation division.

They reorganised the factories to cut costs and streamline production. They secured a commercial alliance with Rolls-Royce of the UK, which brought with it crucial gas turbine technology. They revived long-standing ties with Mitsubishi Heavy Industries of Japan, and Fiat, the Italian car

maker which also has interests in industrial equipment.

Westinghouse also created teams for managing and financing turnkey projects. As Mr Don White, the manufacturing director and a veteran of the transformation of the power systems business, says: "Before, we didn't even have a strategy. Now we know where we are going."

Sales in power generation rose from about \$400m in 1988 to \$1.77bn last year.

Westinghouse made inroads in the market, capitalising on its strong brand image. But amid ever-increasing competition, Westinghouse struggled to make adequate profits.

Last year, power systems made an operating loss of \$207m, down from a \$165m profit in 1994. The results were depressed by \$305m in charges relating to the settlement of legal disputes, dating back several years. One concerned the Philippines and the others the supply of allegedly faulty steam generators. However, even excluding these matters, the (non-nuclear) power business lost \$16m.

The division's profits were made entirely by the nuclear operations (called energy systems), which made \$14m, unchanged from 1994 and earned largely from service and renovation.

The pressure on margins has forced further cost-cutting in the energy systems division. In non-nuclear operations, the company is closing its factory in Pensacola, Florida, with the loss of 850 jobs, to concentrate production at three other sites - Hamilton in Ontario, Charlotte in North Carolina, and Fort Payne, also in North Carolina. The small Fort Payne plant, which employs 250, could also lose work to the Charlotte site.

Mr Zwirn says that the rationalisation is not bringing

any reduction in output, only in cost.

At Charlotte, the company is investing in new space and equipment to absorb the extra production transferred from Pensacola. Mr White says: "We may be small but we are second to no-one in manufacturing."

Mr Zwirn denies that Westinghouse's modest size in comparison to its top rivals - General Electric of the US, and Europe's ABB and Siemens - is a disadvantage. He believes that turnover in power systems, which totalled \$3bn last year, including \$1.57bn in nuclear and \$1.77bn in non-nuclear business, is sufficient to give Westinghouse an adequate presence in international markets.

He also believes strongly in the value of alliances. As well as its new joint venture in China and its agreement with Rolls-Royce, Westinghouse has technology-sharing and marketing agreements with Mitsubishi Heavy Industries in Japan, in steam turbines, and a three-way partnership with MHI and Fiat in gas turbines. Mr Zwirn says: "The massive cost of new projects means we all must co-operate."

Perhaps making a virtue out of a necessity, he adds: "An important element of our global strategy is not necessarily to be a dominant partner."

PROFILE Snell Hydromotor

# River power without dams

Building dams is a controversial business. Only last week, a Malaysian high court ruled that a government decision to build the \$5.5bn Bakun hydro-electric scheme in the jungles of Borneo had violated the law, after finding irregularities in how officials assessed its environmental impact.

Elsewhere, some countries are refusing to dam any more rivers because of concerns about the effects on local communities and ecosystems.

Recently, scientists have even questioned whether conventional hydro-electric power generation can be considered to be truly emission-free in cases where trees and vegetation were inadequately cleared from the reservoir area. Submerged in the reservoir water, they decay and produce greenhouse gases, studies have shown.

With many of the best sites for dams already taken, a big opportunity exists for generating power from rivers without having to build dams. This, at least, is what the UK inventors of the Snell Hydromotor believe. The machine does just that, and can also be used to generate power from tides.

The Hydromotor was designed by Mr Michael Snell and his father Mr Leonard Snell, the controlling shareholders in Snell (Hydro Design) Consultancy. Michael Snell is a civil engineer and a former director of technical services at Stroud District Council, his father was chief designer at Rolls-Royce and was responsible for designing the engines for Concorde.

The machine was developed after the council asked Michael Snell whether he could devise a way to generate electricity from a stream and mill next to its stream and mill next to its new offices. The problem with conventional turbines used in hydro-electric projects was that the "head" - the difference between the water level upstream and immediately downstream of the installation - was too low.

"Conventional turbines will not function well, or won't work at all, if the head is less than two metres," says Mr Geoffrey Linford, a civil engineer who is trying to find a commercial backer for the Snells. "The Hydromotor works down to a zero head."

At the heart of the machine are two four-bladed rotors mounted on shafts that are connected together by passing gears. These ensure that the rotors maintain their designed

angular position relative to each other. In generating mode, the flow of incoming water is divided by a deflector and directed to impinge on the outer parts of the rotor blades, converting the energy from the water flow into rotational power. The machine can work as a pump if the process is reversed.

The hydromotor would fit very neatly into low-head, high volume cascades, such as smaller drops on rivers, says Mr Linford. It could be used, for example, on the two-metre cascades built every two miles or so into irrigation channels on Peru's coastal plain, producing a significant amount of power even if each individual installation was small.

A prototype machine has been under test since last year by Professor Brian Brinkworth and his team at the University of Wales in Cardiff, and detailed results are due soon. Mr Linford says that, as the research continues, it is becoming increasingly clear that the machine could be used in a wide range of applications.

One application could be to replace the sluice gate, or as a combined sluice gate-turbine, in river barrage schemes. Currently, the energy from the flow of the river goes to waste in many of these schemes.

Mr Linford says the Hydromotor uses simple technology - the seals and gears are the most sophisticated components - and as such it "lends itself very much to power generation in developing countries" where it could be manufactured easily.

For the same reasons, however, it has not gone down well with UK producers of high value-added turbines. As Mr Linford observes, it is the antithesis of the products they make.

Michael Snell has funded development so far and patent costs - the machine is patent protected in the US and Australia, and patents are pending for Europe and Canada. Funding is needed for the next stage - to build a full-scale machine at a demonstration site. That would allow a full technical assessment to be made, along with calculations of production costs and the costs per kilowatt of power.

Negotiations are under way with a UK company interested in bidding for the Hydromotor and Mr Linford is looking, ideally, for "an entrepreneur with some vision" to take the project forward.

Andrew Baxter



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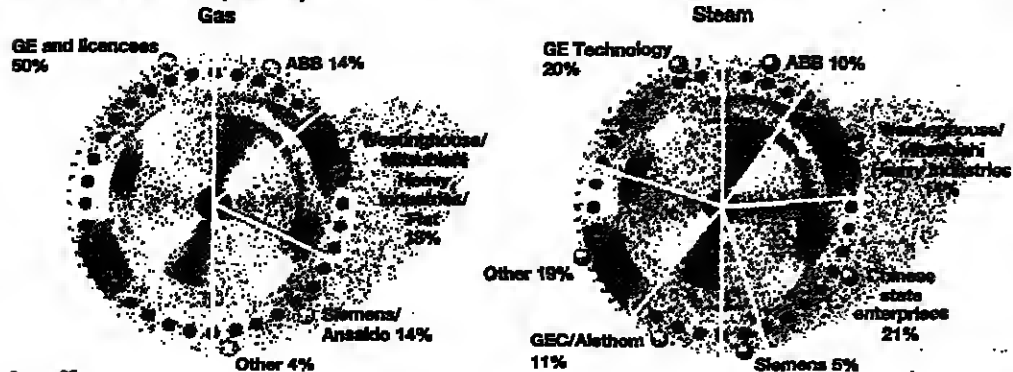


## 8 POWER GENERATION EQUIPMENT

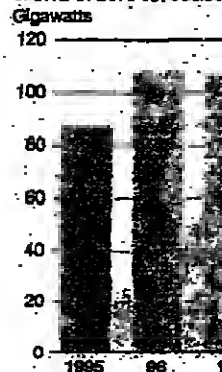
## MARKET OUTLOOK

With flat market forecasts and excess capacity in the industry, producers must compete vigorously for market share

World turbine market (1990-95)



World orders forecast



Global steam turbine generating capacity



Gas turbine capacity



## Squeeze on profit margins

Continued from Page 1

been placed, says Siemens. In nuclear energy, the prospects are even bleaker. The last three plants to be built in western Europe and north America have recently come into production, leaving empty order books. The only realistic prospect of selling a new nuclear power station is in east Asia, where Japan, South Korea, and Taiwan all have construction plans.

In the developing world, there is no shortage of electricity demand, notably in China, India and Indonesia. Projections of developing countries' electricity requirements suggest the world's installed power plant might need to grow 60 per cent by the year 2010, which would bring 1,750,000MW of orders to manufacturers - worth perhaps \$1,500bn-\$2,000bn. Detailed proposals for many of these projects are already available. However, the money is not. GE estimates that it takes up to seven years to bring to fruition a private sector scheme in the developing world, by which time the technical, commercial and financial requirements could all have changed.

In India, for example, Enron, the US energy group, and its partners, including GE, are still waiting for a final decision on the fate of the \$2.5bn Dabhol project for a gas-fired plant for the state of Maharashtra.



Westinghouse combined-cycle plant at Teeside, UK. Westinghouse closed its US factory at Pensacola this year

Although the scheme was one of eight private sector projects earmarked for rapid approval by Delhi three years ago, it has been dogged by political delays. First the government in Maharashtra state changed and the project had to be renegotiated. Then, this year's general elections threw the central government into turmoil. Even though the scheme is likely to get the go-ahead later this year, the delays have cost Enron and its partners dearly.

However, other, more developed countries are increasingly able to organise and finance

even very large schemes. For example, Malaysia earlier this month awarded a \$2bn contract to an ABB-led consortium to build the controversial Bakun hydro-electric scheme in the rain forest of Sarawak. It will be funded entirely by Malaysian finance.

China dwarfs other developing markets, accounting for about half Asia's expected demand for power generation plant in the next 10 years, and about a quarter of the world's. It is pressing ahead with the world's largest power scheme - the \$28bn Three Gorges hydro-electric project, which is

attracting enormous interest from equipment suppliers despite concerns about the environmental impact that have led the US Export-Import Bank to refuse its support.

The scale of the Chinese market has encouraged every big manufacturer to bid for business, driving down prices.

While companies report some caution in price-cutting this year, this may still be wishful thinking. Also, Chinese enterprises have imposed strict conditions, including obligations to transfer technology to Chinese factories. For example, GEC Alstom is transferring

know-how for steam turbines under the terms of a \$2bn contract for expanding the Daya Bay nuclear plant it built near Hong Kong.

The pressure to compete in global markets is changing the industry. The once-cosy ties between power plant suppliers and local state-owned utilities are being replaced by tough bidding wars between international rivals. The integrated companies which dominate the industry believe further consolidation could follow the last phase in the late 1980s, when GEC of the UK and Alcatel Alsthom of France pooled their power and transport businesses in GEC-Alsthom and Asea of Sweden and Switzerland's Brown Boveri merged.

Today, industry speculation centres upon the power interests of Westinghouse, which last year dramatically shifted its centre of gravity from manufacturing to media with the \$5.4bn takeover of CBS, the broadcasting network. Earlier this month, it said it was considering splitting the company between media and manufacturing. Westinghouse executives argue that such a split, recreating a tightly-focused manufacturing group, will strengthen rather than weaken the commitment to making power equipment. But some rival companies believe that a demerger could be a prelude to disposals.

Acquisitions and alliances are developing space as companies seek to share development costs, to secure access to markets and to build low-cost manufacturing centres in developing countries. ABB is expanding a manufacturing network in eastern Europe and the former Soviet Union which

employs more than 30,000 of the group's 211,000 staff and reaches from Croatia to Kazakhstan. GE is consolidating ties with Nuovo Pignone, the Italian diversified engineering group, where it bought control in 1994. And last year Westinghouse won a hotly-contested auction for a joint venture with Shanghai Electric Corporation, China's biggest power plant manufacturer.

The integrated groups argue that economies of scale give them an advantage. The costs of developing new technology are so big that even the largest companies suffer if things go wrong. For example, GE is spending more than \$100m correcting faults which developed in early units of its new F-series gas turbine.

However, fast-moving smaller companies are convinced they also have a future. They say that building power stations has always been a business for consortia - even

ABB, perhaps the most highly integrated manufacturer, does not usually do its own earthmoving and civil engineering works. They add that some customers prefer to buy turbines from one source and another important piece of plant - typically boilers - in nuclear and coal-fired stations - from a second supplier. Babcock & Wilcox, the boiler manufacturing company belonging to McDermott, the diversified US group, retains a leading market share in boilers. Mr Robert Mady, vice-president for international sales and service, says: "Big companies are less flexible and less agile."

Big, often substantial ones, provide good opportunities for smaller groups. For example, Rolls-Royce, the UK engine and turbine maker, has had considerable success in adapting aero-engines for use as medium-sized gas turbines for power plants. It has transferred the technology to

Westinghouse in return for a marketing agreement for the industrial Trent, the power-generation version of its latest gas-turbine aero-engine.

Meanwhile, companies are forging closer ties with their customers, especially with the independent power producers which Siemens estimates account for about 30 per cent of world orders. To get business, manufacturers are increasingly obliged to invest in projects and to help secure funds from other investors for both equity and loans. For example, GE Capital, the GE subsidiary, is as big and experienced in project finance as many banks.

Plant manufacturers are also investing more in their service businesses. They hope to recoup some of the money lost on low-margin plant sales with a stream of higher-margin revenues from after-sales activities. They are trying to exploit computer technologies which will enable them to monitor scores of power stations from a single test centre, saving costs and raising efficiency.

The skills required in the industry have never been greater: competition in technology, marketing, finance, service and international alliance-building, is putting enormous pressures on power equipment makers in the 1990s.

So far, most have reacted positively, improving their performance to levels few would have thought possible 10 years ago. But some groups are better placed than others for global competition. The next few years could see big differences emerging in financial performance as the winners capitalise on their advantages at the expense of the losers.



Global approach: A craftsman in Mannheim, Germany, aligns burners in a combustion frame. Components for ABB's GT24 gas turbine were manufactured in Mannheim and in Dür, Switzerland, then assembled in Richmond, Virginia

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# UK ENGINEERING

## In two minds about long-term prospects

The industry has been written off in the past, but the figures show its economic impact remains strong, Peter Marsh writes

Britain's engineering industry cannot make up its mind whether the glass is half full or half empty. Many companies have made an impressive recovery from the early 1990s recession, but worries remain about the sector's longer-term viability.

The straws in the wind are distinctly mixed. On the plus side there is a solid list of companies, many of them non-UK owned, announcing expansion plans or solid financial results.

According to the industry optimists, a competitively priced exchange rate, relatively low wages, a "minimalist" regime of labour market regulations and few inflationary pressures are all factors making Britain a good place to site and run modern engineering plants.

The UK appears to have taken on board better than some of its European competitors the "mass customisation" techniques needed to make an increasing range of complicated products simply and cheaply to meet different customers' demands.

"The potential for increasing volumes in UK manufacturing is as good as I've ever known it," says Mr John Hudson, chief executive of Wagon Industrial, a diversified UK engineering company selling a range of components to the automotive, retailing and distribution industries.

The stock market indices (see Page IV) appear to support this point of view. Since September 1992, the average share price of quoted UK engineering companies has soared 120 per cent, compared with the 70 per cent rise in the FT-SE all-share index over the same period. Although engineering in the UK is used to being written off as a sector in near-terminal decline, its overall economic impact is substantial.

According to the broadest definitions of engineering, the sector has a gross annual output (including

sales to other parts of engineering) of some £150bn and employs nearly 2m people, roughly half the UK's manufacturing workforce.

But if there are some bullish indicators for the sector, recent economic data have painted a gloomier picture. As manufacturing growth has slowed in the past six months, engineering (which according to most definitions accounts for about 40 per cent of manufacturing in net output terms) has suffered too. The biggest problem is weaker export markets, particularly continental Europe.

In the three months to the end of April, output in mechanical and electrical engineering, comprising the core of the engineering industries, rose just 0.2 per cent in seasonally adjusted terms compared with the previous three months, according to the UK Office for National Statistics. This was well below the 2.7 per cent year-on-year growth rate recorded for 1995.

Concern has been sufficiently strong for the Engineering Employers' Federation, the main trade body for the sector, to warn earlier this year about the risks of the engineering industry sliding into another recession. The latest soundings, however, are more encouraging and indicate that the industry stabilised in the second quarter.

Even in parts of engineering where output gains in the past year or so have been impressive, signs of anxiety are evident. In machine tools, for instance, where production has grown strongly since 1992 and where output this year is forecast to show a 20 per cent rise on last year, some executives are beginning to worry about what is in store for the sector when the next cyclical downturn hits home.

Skills shortages and training remain a problem, with many engineering executives saying the inability to attract the right calibre people, not necessarily those with high technical skills but also covering school leavers with good standards in writing and mathematics, is a big factor holding back expansion.

"While so many factors are in Britain's favour [in engineering related industries] training and edu-

cation remain our Achilles' heel," says a senior UK government official involved with industrial investment.

The extent of conflicting views about the outlook creates difficulties in judging the next few years. "A lot of companies are expressing optimism, but much of this is at odds with the official macroeconomic data," says Mr John Deon, an industry analyst with Albert E. Sharp, the Birmingham stockbrokers specialising in manufacturing stocks.

Somewhat more sanguine is Mr Robin Leggett, publications manager of Marketing Strategies for Industry, a Cheshire-based consultancy concentrating on engineering sectors. "There's not a huge amount of confidence but most factors are pointing towards a pretty robust recovery," says Mr Leggett. "One of the problems is that there are too many doom and gloom merchants talking down the prospects for the industry."

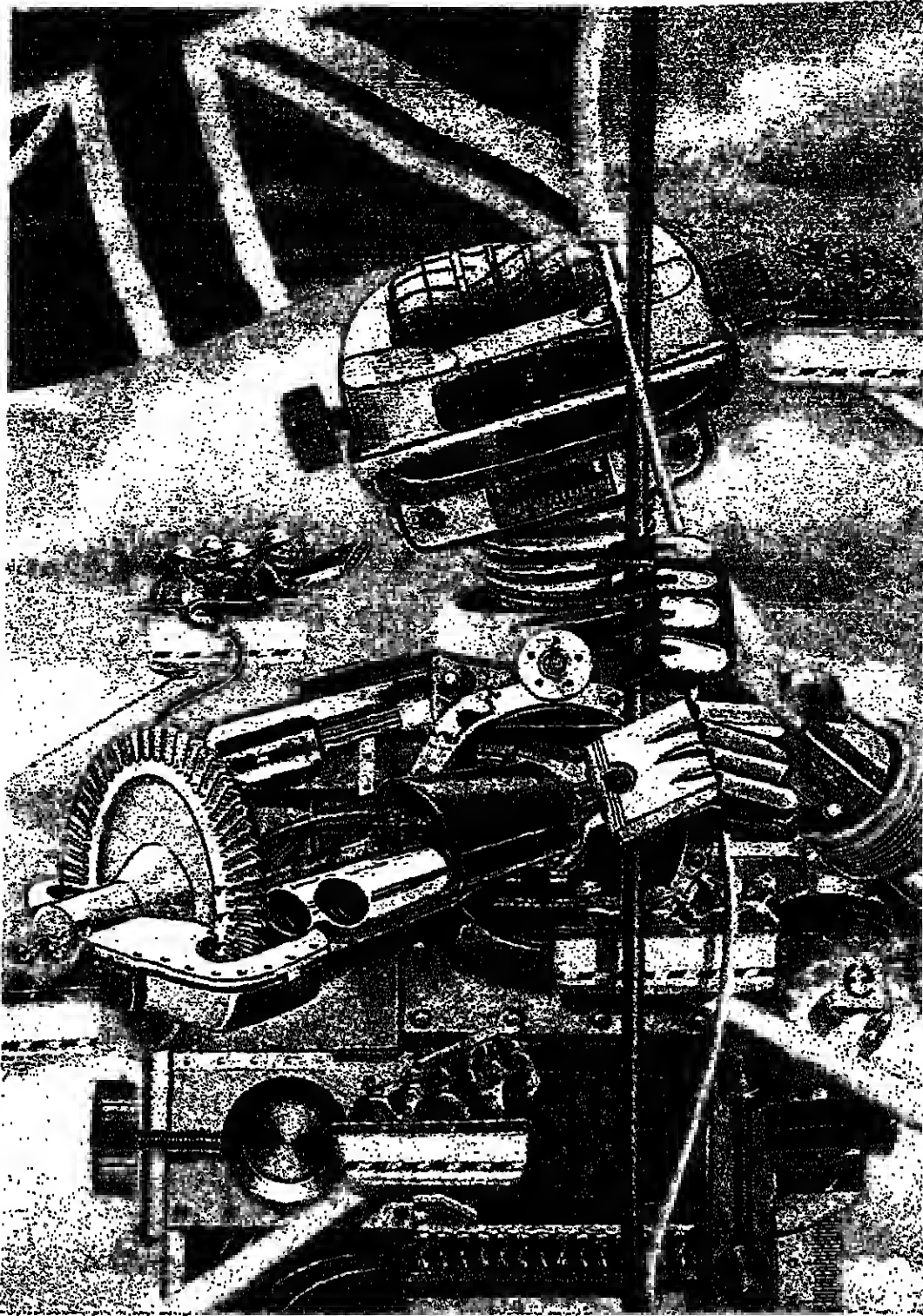
A spate of recent announcements generally support the idea that UK engineering has a reasonably bright future.

● The big guns of the publicly quoted UK engineering companies - including Siebe, TI, T&N and GKN - have all recently reported healthy financial results for 1995 and have said little to dampen expectations for this year and next. Combined pre-tax profits for these four companies in 1995, which gain a large chunk of their sales outside the UK, came to £1.1bn, 31 per cent up on the previous year, on total sales 14 per cent up at of £9.7bn.

● J.C.Bamford Excavators, one of Britain's biggest and most profitable privately owned engineering companies, has recently announced a four-year £100m investment programme in the UK up to 1998, well up on the \$45m it spent in the previous four years.

● An alliance between Fiat, the Italian automotive company, and Cummins, the US maker of diesel engines, is to spend about £70m setting up a new centre in the UK for worldwide engine development, geared particularly to new models of trucks, tractors and buses to go on sale early next century.

● Sandvik, the Swedish producer



of speciality steels and tooling which is one of Europe's biggest engineering companies, has unveiled a tripling of its UK investment programme in which it is spending nearly £40m over three years increasing output at its eight plants mainly in the Midlands

region; ● and Toyota, Nissan and Honda, the three Japanese car companies with UK manufacturing plants, are continuing their programme of "tutoring" UK-based component companies in up-to-date production methodologies in schemes which

have had a big impact on improving the overall commercial performance of the automotive parts sector. Added to this, the broad run of economic data over the past three years shows that the engineering industry has outperformed other sectors in manufacturing since the

depth of the recession.

With some 40 per cent of its output exported, the industry was given a particular boost by sterling's enforced ejection from the European exchange rate mechanism nearly four years ago, an event which led to a large devaluation in the pound against the D-Mark and has helped increase the industry's competitiveness.

Output volumes in engineering and related industries between 1992 and 1995 expanded 11.1 per cent, compared with 7.9 per cent for the whole of manufacturing, according to the UK's statistics office.

Over the same period, output per person in engineering rose 20.8 per cent, compared with 10.9 per cent for all manufacturing, while engineering capital investment increased 40.3 per cent, as against a rise of 23 per cent in related spending in manufacturing.

According to Mr Brian Small, managing director of Ingersoll Engineers, a UK-based consultancy specialising in manufacturing, one of the keys to engineering's better performance relates to new management techniques based around organising teams of workers into small groups (or "cells") and devolving responsibilities away from managers and towards the factory floor.

"To satisfy customers nowadays with their increasingly wide range of demands, you've got to segment markets as much as possible. This way of looking at the world fits in with cell-based manufacturing methods. In bringing together these two ideas Britain is ahead of a lot of other countries," he says.

The point is reinforced by Mr Les James, marketing director at Servomex, a small East Sussex-based maker of gas-measuring equipment and an expert on manufacturing technology. "In the late 1980s probably only about 20 per cent of companies in manufacturing in the UK were attempting world-class manufacturing techniques. Now the figure has gone up to 35-40 per cent."

But according to Mr Geoffrey Robinson, non executive chairman and founder of TransTec, a Midlands-based specialist engineering company and who is also a Labour MP, problems remain. "With the big contraction in industry in the 1980s, Britain lacks a lot of the technological intelligence and knowledge needed for a strong economy," he says. Others point to the need to expand research and development and investment in the industry to help lay the foundations for the next century.

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II UK ENGINEERING

Car components: by John Griffiths

# Merging in unsettled times

Like the car industry itself, this sector has no choice but to globalise

This is a time of great upheaval in the UK motor components industry. In no case has this been more apparent than by the planned merger of Lucas Industries, the largest and probably best-known of the UK motor components group, with Vario Corporation, the US-headquartered diesel engines to braking systems group. The \$1.9bn merger will create one of the world's top ten motor components groups ranked by turnover and the second largest in one of the areas where the partners envisage some of the strongest synergies - braking and traction control systems. There is an outside chance

that the merger, scheduled to be completed by August, might not happen; and that Lucas might fall prey to a predator lurking as yet undeciphered in the global motor components undergrowth.

One such would-be predator, the UK's BBA engineering group, has already sought to pounce - but has been driven back by its own shareholders. Like most industry analysts, they failed to see the logic of BBA seeking to acquire a much larger, mainly automotive group which not only was likely to have proved very difficult to digest but with which BBA itself had few obvious synergies. It was even more puzzling given that BBA has spent part of the past decade reducing its once-strong dependence on the motor components business by disengaging itself from a number of other motor component activities. But if the detailed logic of

BBA's own snap at Lucas was difficult to grasp, the underlying pressures which prompted it are not.

They are, in fact, the same ones which have led Lucas and Vario to seek each other out and which will, doubtless, see other mergers and rationalisations in the not-too-distant future. Like the car industry itself, the motor components sector is globalising. It has no choice. Any components manufacturer which wishes to remain a direct, first-tier supplier to the leading car companies must be prepared to follow them into every market in which they wish to manufacture or otherwise penetrate. That means a commitment by the supplier to its own manufacturing plants, joint ventures or efficient component supply chains in China, the Asian countries, Latin America, Eastern Europe or any other area of the developing

world on which car makers, most in future, rely for growth as the markets of Europe, North America and Japan move ever closer to saturation. But it is not only much increased geographical burdens that the car industry is placing on its suppliers. The car makers see themselves increasingly as assemblers of outsourced component systems rather than integrated manufacturers.

And they want their first-tier suppliers not only to manufacture ever more complex component modules and sub-systems, but to design and develop them as well. Several factors of vital concern to the components sector are implicit in this scenario. One is that suppliers capable of meeting these demands must be large and possess a great depth of technological resources. Another is that no supplier, almost irrespective of size, can hope to be a full-spec-

trum supplier of almost any type of system or module. Thus Lucas and Vario will concentrate on core competencies in specific areas such as diesel engines, fuel injection and braking systems, as will other potential long term first-tier suppliers like GKN, with its specialised expertise in constant velocity joints and related drivetrain systems.

The logical result of such developments, as the chief executive of Lucas Industries, Mr George Simpson, points out, is that "in a decade or so the industry will be dominated by 20 or so very large suppliers with a fully global capability." In its own attempt to be part of the global matrix, according to Mr Simpson, Lucas has been allocating two-thirds of future investment to support the build-up of a fully global capability. Some UK companies do not quite fit this tightly-defined scenario - not least Unipart,

Spending in the UK on components, 1994

Rover	£2.8bn
Ford (UK)	£2.6bn
GM	£1.2bn
Nissan	£700m
Jaguar	£300m
Honda	£200m
Ford Europe	£400m
Toyota	£400m
VW	£400m
Fiat	£200m
BMW	£160m
Ferrari	£120m
Mercedes	£120m
Volvo	£120m
PSA (Peugeot/Citroen)	£70m
TOTAL	£10bn+

Source: Lucas Industries, Cardiff Business School

management quality to bring their operations up to scratch. And it has been a persistent refrain of the Society of Motor Manufacturers and Traders, the Department of Trade and Industry and individual vehicle makers that upgrading the quality and productivity standards of the smaller companies remains one of the greatest challenges facing the UK industry.

However, many have adapted, and are falling naturally into the category of second- or third-tier suppliers, as their customers become not car makers themselves but larger components groups that produce their ever more complex modules and sub-systems. By any standards, the UK motor vehicle and components sector is a big industry. According to DTI statistics, it employs a total of 850,000 people, generates more than 10 per cent of UK exports and accounts for 5 per cent of GNP. The components sector itself comprises around 2,500 companies.

casts Professor Gareth Rhye, motor industry economist at Cardiff Business School. It will compete with the French to be Europe's second largest industry behind Germany.

Further good news for component suppliers is that European vehicle-makers which once shunned UK-produced components are importing more from the UK. They are attracted not just by low labour costs and the relative weakness of sterling but by the quality and productivity lessons they also believe UK suppliers have learned from their Japanese associations. Together Fiat, BMW, Renault, Mercedes and Volvo spent more than £1.2bn with UK-

based suppliers for their own production lines last year - more than double their annual spending at the end of the 1980s.

BMW, which bought Rover two years ago, is also seeking to increase spending on UK-produced components, thus further lifting car makers' total UK component spending well above Cardiff Business School's estimates of over £10m for 1994. Indeed, the combined turnover of the top 100 UK suppliers alone is now in excess of £20bn, with much of their business in exports. With Ford, Rover and Vauxhall also collectively intending to invest a further £6bn in their UK operations over the next five years, the outlook for their suppliers has rarely looked so good.

Outsourcing: by Tim Burt

# An inexorable trend

Increasing costs and customer demands are making in-house production harder



Allen Yurko wants to develop 'standard industry building blocks'

The United Auto Workers Union used the 17-day strike to complain that jobs were being threatened and technological leadership put at risk by the increased shift towards outside suppliers. For industry executives, however, the industrial action marked a vain rearguard attempt to fight the inexorable move away from internal component production to cheaper units manufactured by special-

ist engineering groups. Over the past 20 years, many engineering equipment manufacturers have been founded and grown rapidly as feeder companies for carmakers, white goods manufacturers, aircraft companies and electrical groups. The rationale for GM and others has been that as products become more complex and as customers demand an increasing level of equipment, they can no longer afford to develop and build such products in-house.

Boch, for example, is able to produce anti-lock braking systems equipment in the US at a wage rate of about £20 an hour, compared with \$44 an hour from GM's internal brake business. In the event, GM won the right to source parts from Boch while promising job security at its own plants. The stoppage, moreover, showed just how many components the US motor manufacturer already sources from outside. Pilkington, the UK glass maker, said it had been hurt by the strike which forced it temporarily to shut down some of its plants. Lucas Industries, which supplies GM with electrical components, said off some US employees and BSG International, which supplies wing mirrors, said it lost about \$1m of sales.

Such companies say car makers have turned to outsourcing more than any other

original equipment manufacturers (OEMs). Of the components used by most big international motor manufacturers, products such as brakes, brake pads, electronics, pistons, piston rings, fuel injection systems, mirrors, windows and seats are all offered by outside suppliers.

Not only that, vehicle manufacturers are increasingly asking suppliers to provide integrated systems. One group might, for example, provide brakes, actuators and electronics in a ready-to-install package. By shifting responsibility for product development on to the suppliers, the OEMs can concentrate on issues such as brand management and vehicle design.

Mr George Simpson, chief executive of Lucas Industries, the automotive and aerospace equipment group, says: "They will retain final assembly and test responsibility for their vehicles but outsource larger and larger modules." He predicts that the OEMs might soon outsource their aftermarket logistics.

His view is echoed by Egis, the Paris-based management consultant, which argues that carmakers may consider spinning off their engine divisions into fully independent companies. It estimates that over a number of years, a specialist engine maker would be able to offer engines of improved design at prices between 3 per cent and 7 per cent below competitive suppliers. That assumes, however, that such engine makers would have enough financial muscle to invest in new products and establish an international distribution network. In diesel engines, where outsourcing is already prevalent,

there is a marked shift to consolidation. Vario Corporation, the US engineering group which owns the Perkins diesel engine business, has agreed to merge with Lucas.

The company says it needs to have a stronger balance sheet and larger supply chain to justify its plans to launch a new engine in each of the next four years. While motor components manufacturers have enjoyed the largest swing in outsourcing, other engineering groups are also exploiting the trend. Stebe, the international controls and temperature appliances group, manufactures electronic power products for most of the world's largest white goods manufacturers.

Like Lucas, it too believes that it needs to be a systems integrator - taking over more of the design and development of components from the likes of Whirlpool and Electrolux. To that end, it paid £200m earlier this year for Unitech, the power suppliers business, which should enhance the range of products it offers.

Mr Allen Yurko, Stebe chief executive, says it wants to develop "standard industry building blocks" for the power components and circuitry of products such as refrigerators, kettles and washing machines. "Modular systems is where the market is going. It's never easy to persuade customers to outsource, but modular systems is where the market is going - it not just about good value but making things more efficient," he says.

While engineering groups such as Stebe and Lucas are determined to become systems integrators, others such as GKN and TI Group are committed to refining existing products and taking them into more and more new markets. What unites all these groups is size. They argue that the days of a fragmented component industry supporting thousands of niche manufacturers are over. According to Mr Simpson at Lucas: "Globalisation means that there will be fewer but larger first-tier suppliers in existence as we enter the next century."

That trend has been driven partly by a paternalistic streak among the OEMs. While on the one hand, they may be willing to outsource a large number of components, they still want to exercise considerable influence over the design and quality of the products they receive. Boeing, like many other US manufacturers, has a preferred supplier status which it awards and withdraws from these out-sourcers that meet its standards. Losing such status, as some companies have found to their cost, can seriously dent profits. Some European car makers also have a strong sense of nationalism when it comes to ordering parts. Peugeot-Citroen of France, for example, warned recently that it would not renew contracts with the French components group Valeo if it fell into foreign hands. Renault and Germany's Volkswagen were said to hold similar views. That suggests that while OEMs are happy to take the benefits of outsourcing - such as lower cost products and reduced R&D spending - they are discriminating customers which demand the best of engineering groups. Not all companies are able to satisfy them, especially the medium-sized operators without global spread or market leading products. There are clearly large opportunities to win valuable business as a systems supplier, but the costs of developing new technology and developing an international presence may mean that only the fittest survive.

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Machine tools by Peter Marsh

# Playing its part

Cost-cutting, spending on R&D and patience have all contributed to recovery

Mr Lloyd Brandenburg, in charge of a big scissors production project in Wausau, Wisconsin, is proud of it. He is playing a part in the recent upturn in the UK machine tool sector.

He is project engineer at the US division of Fiskars, a large Finnish-owned maker of scissors and other cutting equipment. His plant in Wisconsin is among the biggest in the US, making 25m pairs a year mainly for consumers.

A key to efficient scissors production, all the more so because of heavy price competition in the industry from low-labour cost countries in Asia, is a high level of automation.

Highly specialised grinding machines, imported to Wisconsin from Jones & Shipman, a 97-year-old UK machine tool company, have helped keep Mr Brandenburg's business in good shape. The orders have been a factor behind the improved performance recently by Jones & Shipman which hit severe financial problems in the early 1990s recession.

Jones & Shipman, with annual sales of about £22m, is one of four UK-owned companies in the top 10 producers in Britain of machine tools. These 10 companies account for about 60 per cent of total UK production, which has grown strongly from the 1990s recession and this year is expected to be 20 per cent up on last year at about £300m.

The industry's rebound has put a new spring into a sector which has suffered a long and slow decline over the past 50 years with many venerable names having vanished without trace as a result of foreign competition and an uncompetitive exchange rate.

Jones & Shipman, however, has managed to cling on. According to Mr John Wareing, managing director of the Leicester-based company, this is partly due to strong support from its investors during its difficult financial period and a new strategy announced in

1992 that dramatically cut costs by putting more work out to specialised subcontractors as opposed to having parts made by the company's own workers.

Another key has been continuing spending on research and development, which at some £1m a year, says Mr Wareing, is high for a company of Jones & Shipman's size.

The so-called "creep-feed machines" sold to Fiskars - of which two have been shipped to the US in the past year at up to \$300,000 each - illustrate this point. Creep-feed grinding involves passing the workpiece under the grinding wheel at a slow pace, allowing greater metal removal in one pass, and thus increasing the customer's productivity. The feeders were originally used in high-precision industries such as aerospace but more recently have been used to make more mundane articles such as scissors - where the hardware can be used to machine extremely precisely and quickly scissor blades with the minimum of human intervention. In the case of Fiskars' use of the machines, each piece of equipment can fashion up to 600 blades at a time.

Jones & Shipman took over the rights to its brand of creep-feed technology in the 1991 from Brown & Sharpe, the venerable US machine tool company which has since pulled out of the industry. It has poured much of its engineering resources into updating the technology, particularly the computerised controls needed to make the machinery capable of working 24 hours a day, seven days a week.

According to Mr Brandenburg, who was introduced to the creep-feed ideas originally through buying Brown & Sharpe equipment, Fiskars looked at the possibility of buying machines from other companies making similar hardware, such as Elb of Germany. However the company decided to opt for the UK models.

The biggest maker of machine tools in the UK this year is expected to be Cincinnati Milacron, the US-owned company which has a plant in Birmingham. Production from the factory is likely to be worth about £36m, with 80 per

cent of the hardware exported to companies in a range of industries including domestic appliances, aerospace and automotive.

The second and third biggest makers of machine tools in the UK are, according to industry estimates, Western Atlas, also of the US, and Yamazaki Mazak of Japan. Expected production this year from these two companies, both of which have been expanding quickly in the past two years, is put at £90m and £73m respectively.

Earlier this year, in a move that further underscored the better prospects for the industry, Heller, the privately owned German machine tool company, announced an outline plan to spend £15m in expanding its factory in Redditch in the Midlands. The plan could ultimately lead to 300 new jobs.

According to Mr Neil Mitchell, finance director of the UK sales division of Gildemeister, another German machine tool company but one which does not have a UK production base, prospects for his company's machines in Britain are highly promising - with strong demand in particular from the automotive parts industry. "Our orders last year were 20 per cent up on 1994," says Mr Mitchell, whose company sold £9m worth of machines in Britain in 1995.

The strong run for the UK machine tool industry needs, however, to be put in perspective. This year's likely production means the sector is only just about clawing back the ground it lost in the early 1990s recession, bringing output levels up to those in 1990. Output fell to less than £900m in 1992.

"The production growth of the past couple of years has been strong, but it's been from a position of lagger all," says Mr Robin Leggett, publications manager of Marketing Strategies for Industry, a consultancy specialising in the engineering industry.

Reflecting this point, there are some in the machine tool industry already beginning to worry about the next downturn. They are wondering out loud if the sector will be strong enough to survive without a further falling from grace of large and well-known companies.

PROFILE Cameron-Price

# Moving from cars to cosmetics

Switching from the automotive industry to the world of cosmetics may sound a little ambitious for most small engineering companies. But for Cameron-Price the eclectic mix of markets - ranging from brewing to ball-point pens - reflects how small engineers can develop an unusually broad strategy.

Traditionally the Birmingham-based company has concentrated on the plastic injection moulding of automotive parts, and the car industry still represents three-quarters of its turnover today. However, the company now sees itself less in terms of manufacturing one line of products than providing a whole engineering package to its customers.

Mr Tony Banks, managing director, tells how the strategy was underlined by a visit by an executive from Nippondenso, one of the company's largest customers alongside Lucas and Denlop. "He told us we were not selling injection mouldings but selling solutions, because we had saved him money by selling him our products."

"Ten years ago we would have been given a drawing by a customer and we would have manufactured in that drawing. Increasingly customers are pushing down the design responsibilities, which is good because one of our main strengths is innovation. With our expertise in plastics and other materials, we can replace metal parts to make products which are technically as good, but at lower costs," he says.

It was this approach to problem-solving that led to the company's involvement with Boots in designing the packaging for a new line of cosmetics. By using its computer design technology - normally employed to develop car parts - the company created its own designs based around the cosmetics' measurements.

It was then able to produce three-dimensional pictures of prototype packaging, combining the work of design consultants with plastics engineers in a successful bid for the contract. A similar attitude has won the company work designing and

producing the widgets in beer cans, as well as presentation boxes for Parker pens.

The realisation that the company's strength lay as much in its design work as its technical skills has contributed to dramatic growth in recent years. Turnover now stands at around £2m compared to £1.2m five years ago, helped by a substantial investment plan worth around £2m over that period.

The investment - in a new factory and in integrated computer-controlled machinery - has also helped to reduce labour costs and improve productivity. Five years ago, the company employed 120 people, while today the workforce stands at around 90 and the factory works at capacity throughout the week.

Last month the management completed a buy-out deal from the company's founder, with the help of £2.5m of equity from Leeds Development Capital. Mr Banks says: "We wanted to be a world-class supplier, and to do that you have to

have world-class equipment. If you do not invest, you are dead and you end up with clapped-out old plant, doing the type of production nobody else would want to do."

"The industry learned a bitter lesson 10 years ago, when we were exporting jobs to Germany, France and Spain. Today we can manufacture identical products at a big cost saving to them, not just through the rate of exchange and social costs but because our output is so much better."

As a smaller company with large ambitions, Cameron-Price has relied on partnerships with the public sector such as universities and local authorities. It uses the services of Midland universities both for training and for solving manufacturing problems.

But the most important partnerships are those with its own customers. With Lucas, for instance, Cameron-Price is developing a system of electronic data interchange. This will allow the company to monitor stock levels at Lucas and reduce its

customer's paperwork when ordering supplies. For Cameron-Price, the move is a logical progression of a trend which began with open-book costing, following the lead of Japanese manufacturers.

The company has attempted to create an entire corporate culture around these customer partnerships. Machine operators are trained to be able to talk directly to customers to explain how their work is progressing. And the company has improved its recruitment to take on more graduates - particularly those with language skills.

Computer-aided design has proved essential to the new engineering service which the company aims to provide. When Ford in Dagenham asked Cameron-Price to help develop a new brake fluid reservoir, the Birmingham company was able to turn a Ford sketch drawing into a three-dimensional picture and then into a prototype with full costings within one week.

Richard Wolffe

Interview: Graham Mackenzie

# An image problem remains

The federation has been casting around for a new sense of purpose, writes Peter Marsh

The engineering industry in the UK suffers from a "fairly serious" image problem, with too many people regarding it as old-fashioned, boring and dirty. Such a sentence could easily have been written any time over the past 30 years. However, it remains true today, according to Mr Graham Mackenzie, director general of the Engineering Employers' Federation, the main trade body for the industry.

"The profile of engineering has not been well understood,"

says Mr Mackenzie. "The industry has got to try to counter this by talking more about the positive side to the industry and the good and satisfying jobs that are available."

The federation, which this year is celebrating its 100th birthday, has launched a series of scholarship schemes in which member companies will make available £100,000 to boost education and training in the industry.

Mr Mackenzie says that shortages of people, of virtually all skill levels, is one of the industry's biggest problems. This is not simply down to difficulties in getting enough good people to progress through on-the-job training and take on senior jobs in the sector, but can be linked to

lack of perceived attractiveness to the industry in schools and higher education. "Not enough people are studying [engineering related subjects] at A level and a large number of university science places are unfilled. What's happening is quite frightening," he says.

The EEF has got problems of its own. Talks about merging its activities with those of the Confederation of British Industry, a much bigger body and which speaks for a range of service sectors as well as manufacturing, broke down in 1994 because of disagreements about how to marry the two organisations' interests.

Since then, the federation, with about 5,000 members split into 15 regional groupings, has cast around for a new sense of

purpose. Earlier this year it published a strategy paper committing the federation to improve services to members in areas such as advice on exporting or training, as well as setting out plans for a 10 per cent increase in members.

Mr Mackenzie believes prospects for UK engineering are bright, in spite of the downturn in the sector since the end of last year. "Britain is increasingly competitive in world terms. It's the place where [overseas companies] come and build car plants." However, he insists big problem areas remain - one being lack of sufficient capital spending.

One view on this is because the UK has a fairly good record in expanding output through teamworking and other man-



Mackenzie problem areas remain

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PROFILE Rotork

# Genteel start for tough valve controls

Change has come from developing new technology to meet competition from abroad

Rotork, a leading manufacturer of valve controls for the oil, water and power industries, seems slightly out of place in its home base in the prosperous suburbs of Bath. It looks rather incongruous that equipment designed for some of the world's toughest operating environments starts life in a genteel corner of the English west country.

Yet Rotork's location is not that strange because the towns of the west country hide one of the UK's great reserves of engineering skill and experience. Many are in the defence and aerospace industries, linked to British Aerospace factories around Bristol. But others, like Rotork, have developed independently.

Until the late 1980s, the company was content with steady growth in sales and profits, without striving to exploit to the full its world-class technology for fluid controls.

Since the late 1980s, the company has transformed itself with a drive to maximise its potential, respond to growing international competition and develop new technology, much of it based on electronics. "We are in a specialised market area. Control systems are becoming more and more sophisticated, so we can provide higher value-added products year by year," says Mr Bill Whiteley, chief executive.

Turnover has soared by nearly 70 per cent since 1990, to £30m last year and profits have doubled to £15.3m, fuelled by demand from overseas, mainly from east Asia. Exports account for over 80 per cent of UK

production. Rotork's world market share has risen from 25 per cent to 30 per cent. It employs over 830 people, including 280 in Bath, and others in plants in Luton, the US and India.

Rotork's main products are actuators which control valves in refineries, pipelines, power stations, and water and sewage systems. Twenty years ago, the valves were mostly controlled individually but the development of electronic control systems has enabled Rotork to integrate many valves into a single control system. Mr Whiteley estimates that between a quarter and a

third of Rotork's actuators are now sold in control systems packages. Valves on 20km of pipeline can be linked into a single network.

More recently, Rotork has launched a range of actuators operated by hand-held remote controls

which are becoming more and more sophisticated, so we can provide higher value-added products year by year," says Mr Bill Whiteley, chief executive.

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extensively as sub-contractors on large projects for engineering groups such as ABB, the Swiss-Swedish company.

As well as up-grading its technology, Rotork has responded to competition by cutting costs. It has abandoned a long-standing policy of double-sourcing key components in favour of developing closer ties with fewer suppliers.

At the same time, Rotork has greatly expanded its use of sub-contractors, farming out work which used to be done in-house to save costs. Its pursuit of savings has led it increasingly to rely on British suppliers, reducing its component imports from 30 per cent to 10 per cent for metal parts such as castings.

But electronic components are still mostly imported for lack of suitable domestic manufacturers.

Rotork's out-sourcing efforts have encouraged the growth of sub-contractors in and around Bath, many of them working mainly for Rotork and increasingly sharing in product development. Meanwhile, Rotork has streamlined production at its main plant in Bath to cut costs and raise quality. With a vast range of 2,500 different types of actuator almost all made to order, careful control of the production process is the key to good plant management.

The company has recently invested £11m in a computerised system which integrates everything from design to sales. It enables design engineers to feed their designs into the computer and then check the progress of their products through the factory. Product development times have been cut from 18 months to six. Inventory management has also improved with the average stock turn falling from 18 weeks in the 1980s to eight.

Stefan Wagstyl

Castings: by Peter Marsh

# A close-to-home strategy

Diversifying into new sectors and workforce flexibility have contributed to unexpected growth

A new rule is guiding the business life of Mr Andrew Cook, chairman of William Cook, Britain's biggest maker of steel castings. He has vowed never to operate a plant more than two hours away from the front door of his home just south of Sheffield. Mr Cook is very much a hands-on chairman. He says: "A business that is neglected - it could be big or small - will go into decline. If you've got an absentee shop owner the shop will go off."

He did not always have this point of view. Between 1990 and 1992 Mr Cook looked around the rest of Europe for castings plants to buy, and also considered a range of acquisitions in other areas of engineering.

He did not find anything worth buying - and anyhow the straitened economic climate of the time might have made deals difficult.

"The two years were totally wasted," says Mr Cook, who says he is now content to stick with his plans of minimal factory expansion.

In spite of the slimming down of his ambitions, Mr Cook has already made his

point - which has been to show there is still life in what many have taken as being a pretty moribund industry.

In the late 1980s William Cook - a publicly quoted company which had previously been owned by the Cook family and of which Andrew Cook took over as chairman in 1981 - went on a buying spree.

During this, it purchased a string of about 14 castings units. It closed many of them and consolidated the rest into three plants in the Sheffield area, one in Leeds, one in Durham and one in Derbyshire.

Mr Cook has squeezed out profits from the plants, which export a third of their production, with about a half of the overseas sales destined for the US.

Customers include a range of companies in general engineering, including the construction equipment, defence, chemicals and mining sectors. Customers include Caterpillar and J.C. Bamford Excavators, two of the world's biggest makers of earth movers - and Vickers, which makes tanks at two plants in Leeds and close to Newcastle on Tyne.

William Cook claims to account for roughly half the UK's total production of steel castings, of some 125,000 tonnes a year. The total output is now about half the figure of the early 1980s.

Taking into account all castings, the UK produces about

1.1m tonnes a year, with 85 per cent of these made from iron and a small amount made from aluminium and other non-ferrous metals.

The recent expansion of the UK car industry, helped by the increased production by Toyota, Honda and Nissan in their "transplant" factories set up over the past decade, has spurred production of castings for the vehicle sector. Other

industries which are big users of iron castings in particular include domestic appliances and machine tools

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boosted through a string of orders from Toyota.

In the case of William Cook, one reason suggested by Mr Cook for his company's good performance over the past few years is the UK's "highly flexible" workforce. By this he means people are sufficiently enthusiastic and motivated not to mind switching around between different types of jobs in manufacturing plants. Job security and the fear of unemployment, he reckons, makes people more inclined to work more vigorously than in the past.

Two other castings companies - mainly involved with iron castings or products made from iron/steel mixtures - which have announced expansion plans are Rudge Littley, based in West Bromwich in the West Midlands, and James Maude, of Mansfield.

Both are old-established, privately-owned companies which earn a large part of their incomes through supplying machine tool builders, as well as other parts of the engineering industry. Rudge Littley, with annual sales of just over £8m, is spending £1.5m on new plant and equipment, while James Maude has started a £3m investment programme to expand its £10m a year production possibly to £15m over the next few years.

Mr Roy Everett, chairman and chief executive of Rudge Littley, and who also owns a 30



Andrew Cook: hands-on chairman

per cent stake, says his business has expanded thanks partly to a policy of diversifying into supplying a range of sectors, particularly those with good growth prospects. He reckons that sectors concerned with environmental areas - such as water treatment and sewerage - are seeing steady demand for new investments. As a result making castings for makers of equipment such as pumps which supply to these sectors has been for his company a sensible growth strategy.

Mr Roy Grundy, a business strategy consultant working for James Maude, and who has put together essential elements of the company's expansion plans, says: "In our case we have doubled turnover compared to three years ago by concentrating on medium- to large-size castings for a range of different companies and keeping altogether out of the automotive industry where the price pressures are that much tougher."

PROFILE IMI

# Small bore goes for Olympic gold

In the drive for markets abroad, it has pared down its interests to three core areas

There are few engineering companies that can claim to be competing for a medal at the Olympic games in Atlanta.

But in the arcane sporting world of small-bore target shooting, IMI, the international group based in Birmingham, is expected to play a central role in winning at least some of the

honours this summer. Among top-class marksmen, IMI's Tenex 0.22 ammunition is seen as one of the most accurate in the world and is regularly selected in international competitions.

But whatever the reputation for world-class performance in shooting circles, IMI's cartridges are very much a vestige of the past for the engineering group.

The ammunition is in fact produced by one of the group's founding companies, Eley, which began manufacturing bullets in 1828.

Although it is based on IMI's head office site, the company is one of its smallest subsidiaries, with a turnover of around £2m a year.

For IMI, Eley harks back to its origins as Imperial Metal Industries, when it was floated by ICI in 1978.

Today IMI is no longer either imperial or reliant on its metals business, which was also based on its head office site.

Much of the management's focus over the last decade has been directed away from the old metal-bashing businesses serving the UK's markets towards added-value products exported across the world.

In 1990 the group's turnover was weighted heavily towards the domestic market, representing 60 per cent of group sales.

This year that figure is likely to have halved, with around 70 per cent of turnover coming from overseas markets.

In spite of such a geographical turnaround, Mr Alan Emson, finance director, says: "I do not think there has been a fundamental change in our culture over the last 10 years. We do encourage people to manage their own businesses rather than follow head office demands."

"However, we have invested heavily recently - around £50m a year for the last five years - because we are competing in the world and we have to be world leaders in that respect."

Alongside the drive to become an international participant, IMI has pared down its range of businesses steadily to concentrate on three core areas: building products, drinks dispense, which produces machines handling soft drinks and beers, and fluid power, involving pneumatic valves and fittings.

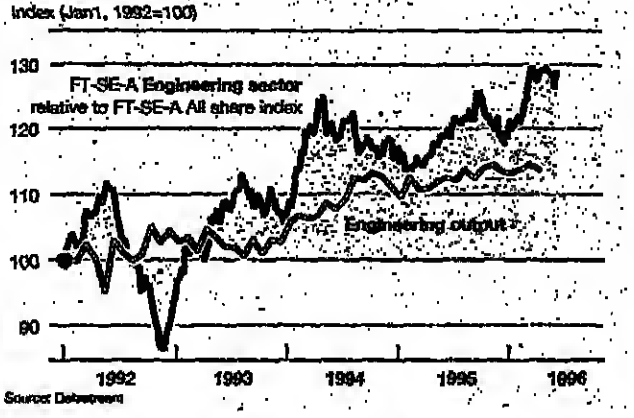
Building products has seen one of the most dramatic moves over the last 12 months, with the £130m purchase of Helmeier, the German manufacturer of radiator valves, in January.

The acquisition - which represents just the sort of higher value-added product the company aspires to - is intended to fit into IMI's existing product line of copper tubes and fittings for the plumbing and heating markets.

IMI's management is confident that Helmeier will grow as it uses its global distribution network to market the radiator valves.

However, some City analysts query the acquisition at a time when the German market has turned down and the UK building industry shows few signs of recovery.

The other dramatic move came in April when IMI announced it was to sell most



of its stake in its troubled titanium business. After sustaining heavy losses through the 1990s, mostly because of the collapse in military and civil engine orders, IMI transferred its titanium business to Timet of the US.

The deal, in October, created one of the world's leading titanium producers - ironically, just as the UK operations returned to profit in the last quarter of 1995.

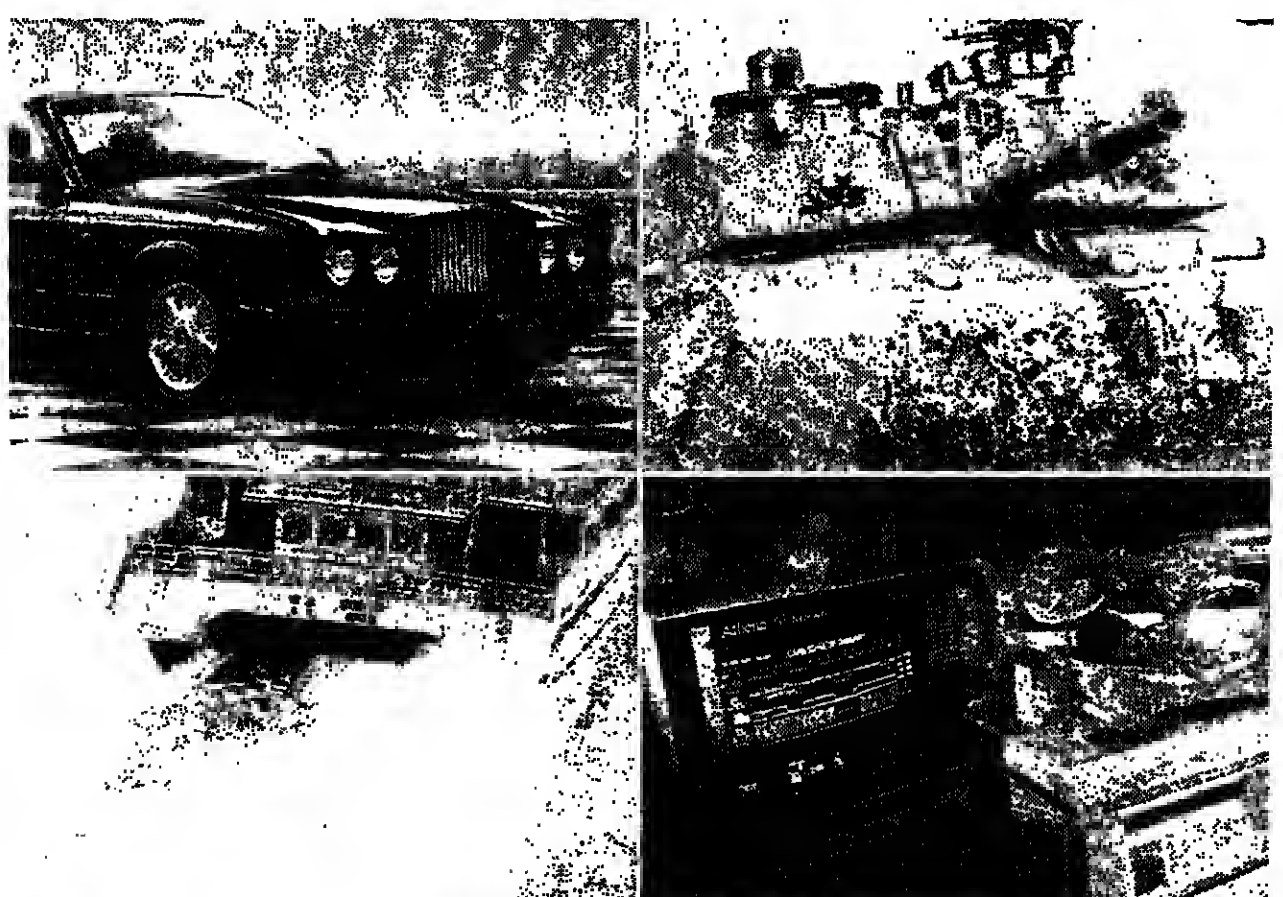
But this year IMI raised £118m by selling most of its interest in Timet. This left a large hole in its fourth division - special engineering. As a result, some analysts feel this division, which includes Eley and Birmingham Mint, could be facing further sell-offs.

The pressing question for IMI is what direction the group should now take, as the Timet deal leaves the group with very low gearing - even after paying for Helmeier.

Mr Emson says: "I think there is little doubt we will see further growth by acquisition in fluid power. The same is likely in building products, but you are more likely to see organic growth in drinks dispense because we are already

very strong in most markets." For some in the City, IMI has come across as a less attractive engineering group than some of its UK rivals. This has been the case particularly after the

Richard Wolfe



# What's in a name?

It's the strength Vickers P.L.C. derives from its group of over twenty companies, all of whom are top names in their fields.

In Vickers Automotive, Rolls-Royce and Bentley Motor Cars continue to evolve niche cars such as the latest Bentley Azure convertible, all of which redefine the word 'exclusive'. Just as Cosworth Engineering on power winners on the race track while their unique patented castings process is being used by some of the best marques in the world.

Off the beaten track, high performance of a different kind is achieved by Vickers Defence Systems. Their Challenger 2

Main Battle Tank is undoubtedly the most formidable in the world.

At the leading edge of turbine component science, Vickers Propulsion Technology marine companies are also foremost producers of controllable and fixed pitch propellers and thrusters, along with their world beating advanced water jets.

In neurology and intensive care, Vickers Medical Division products such as Air-Shields' incubators and S&W Medico Teknik Monitors create new standards

in medical care. Setting such standards in over 80 countries, it's easy to see just what's in the name of Vickers P.L.C.



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**Engineering Training Authority works to raise skill and qualification levels in engineering manufacture by:**

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- Representing employers' training interests

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- get extra help with important projects
- capitalise on new techniques
- improve graduate recruitment

**For details contact:**  
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**The Year in Industry is one of four industry-based programmes promoted by The Royal Academy of Engineering under the banner of the Engineering Education Continuum. They aim to encourage very able students to take up careers in engineering.**

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